CITY OF BIRMINGHAM

REPORT OF THE MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1944

Public Health Department,
The Council House,
Birmingham, 3.

To the Chairman and Members,
Public Health and Maternity and Child Welfare Committee.

This preface is being written some months after the defeat of Germany and shortly after Japan's surrender. The data on which the report is based, however, are the product of a year during which the country was still at war, and the records have still to be read in the light of war-time difficulties and limitations. I feel that, many as are the directions in which the public health services are capable of further improvement and development, the City can take pride in some of the results of the year's work. Thus, Birmingham attained new low records in respect of its maternal mortality, its infant mortality—which for the first time fell below that for England and Wales as a whole—and its neonatal mortality among infants for the first month after birth. A notably low infant mortality among illegitimate children was maintained, though the unusual experience of 1940 and 1943, of an illegitimate lower than the legitimate infant mortality was not repeated. The stillbirth rate also created a new low record. The birth-rate rose substantially above the rising rates of the immediately preceding war years.

The picture is not, of course, all rosy. For example, the rise in birth-rate is accompanied also by a steady rise in the illegitimate birth-rate, and this in particular among married women. One of the most unhappy bye-products of the war will be the homes broken, and the lives of husbands and wives, and still more of children, spoiled. The Department has continued to make great efforts during the year to minimise the damage to these children, by its encouragement either of home care, of foster-mothering, or of adoption according to the particular circumstances.

There was a further increase, though only a small one, in the incidence of tuberculosis of the lungs in the City. Vigorous efforts have been made to stem the growing waiting lists for admission for sanatorium treatment, in part by restoring war-damaged wards and opening up new wards, and in part by endeavouring, though with only a modicum of success, to recruit additional nursing and domestic staffs for the sanatoria.

The records of venereal disease happily showed a considerable reduction in the number of new cases of syphilis and of gonorrhoea

coming to the clinics for diagnosis and treatment. The small number of children reporting with congenital syphilis also decreased materially, and thus gave evidence of the effect of past measures of control.

Housing conditions have been a major source of anxiety during the year. Not only are empty houses practically non-existent for the very large number of families needing them, but reduced supplies of materials and of labour have meant that on a very large scale necessary repairs of dilapidated property have been executed only in part or not at all, and long delay has occurred all too frequently in the abatement of even major public health nuisances in relation to housing. At the time of preparation of this preface, considerable improvement has occurred in the supplies of building materials. The shortage of labour among firms undertaking such repair work continues to be acute, with however, some indications of a commencing improvement.

The year saw an extensive and fruitful campaign against the rat population of the City sewers, and the report contains particulars of the manner of that campaign.

The City hospitals have continued to fulfil their essential part in the health of the community, in close collaboration with the voluntary hospitals ; and 1944 was indeed a peak year in respect of admissions to Dudley Road Hospital.

The war continued its drastic influence on the activities of the Department throughout the year, interlacing the normal services of peace-time with, for many of the staff, a variety of war-time additions and subtractions of function. I am proud to testify to the excellent spirit of the Department, to ready team-work and absence of friction, as well as to the wholehearted willingness with which each and every member of the staff has responded to the calls of the service.

I desire at the same time, Mr. Chairman and members of the Committee, to record my grateful appreciation of the kindly consideration and support which you have so uniformly shown throughout another year of endeavour for the public health.

I am,

Your obedient Servant,

H. P. NEWSHOLME,

Medical Officer of Health.

SECTION A

SUMMARY OF STATISTICS

For the Year 1944

Area (in acres)	51,147
Population (Census, 1931)	1,002,603
Population, estimated by Medical Officer (Civilians only)	990,000
Population, estimated by Registrar-General (Civilians only)	993,310

Extracts from Vital Statistics of the year 1944:

Birth-rate per 1,000 population	22·8
Stillbirth rate per 1,000 total live and stillbirths	25
Crude Death-rate per 1,000 population	11·2

Maternal Mortality :—

	Excluding maternal deaths after abortion	*Including maternal deaths after abortion*
From sepsis :		
Rate per 1,000 live and still births	0·26	0·60
From other causes :		
Rate per 1,000 live and still births	0·69	0·74
Total Maternal Mortality	0·95	1·34

Infant Mortality :—

Deaths of infants under one year of age per 1,000 live births :

Legitimate	41
Illegitimate	62
Legitimate and illegitimate	42

POPULATION AND MORTALITY STATISTICS

Population

On such information as is available so long after a census, the civilian population of the City is estimated to be about 990,000, and this figure has been used throughout this report for the calculation of various rates.

Births (see page 15)

Deaths

The death-rate for 1944 was 11·2. The average for the ten years prior to 1944 was 11·9, while that for 1943 was 12·1. The death-rates for 1940 and 1941 were swollen by air raid deaths.

The changes in the death-rate in England and Wales and in Birmingham during the past forty-four years can be seen from the figures below, although the figures for 1940 and 1941 obviously cannot fairly be compared with others.

DEATH-RATES IN BIRMINGHAM AND ENGLAND AND WALES

	Birmingham.	*England and Wales.*
1901–1905	16·5	16·0
1906–1910	15·0	14·7
1911–1915	14·6	14·3
1916–1920	13·4	14·4
1921–1925	11·5	12·1
1926–1930	11·6	12·1
1931–1935	11·2	12·0
1936	11·3	12·1
1937	11·7	12·4
1938	10·9	11·6
1939	11·4	12·1
1940	14·3	14·3
1941	13·2	12·9
1942	11·8	11·6
1943	12·1	12·1
1944	11·2	11·6

The death-rates in Birmingham and England and Wales, so far as the latter are available, from the more prominent causes of death over a series of years are shown below :—

Cancer

	Birmingham.	*England and Wales*		*Birmingham.*	*England and Wales.*
1935	1·52	1·59	1940	1·61	—
1936	1·57	1·62	1941	1·70	—
1937	1·62	1·63	1942	1·77	—
1938	1·59	1·66	1943	1·83	—
1939	1·55	—	1944	1·75	—

The increase in cancer of the respiratory organs among men, but not among women, continued the upward course noted in the Annual Report for 1943, rising from 21·2 to 23·5 per cent. of all male cancer deaths.

Diseases of the Heart and Blood Vessels

The death-rates during the past ten years have been as follows:

	Birmingham.	*England and Wales.*		*Birmingham.*	*England and Wales.*
1935	3·14	3·46	1940	3·31	—
1936	3·43	3·78	1941	3·10	—
1937	3·40	3·83	1942	2·87	—
1938	3·45	3·79	1943	3·02	—
1939	3·65	—	1944	3·15	—

The reduction since 1940 is more apparent than real, for it is related essentially to a change in the Registrar-General's system of coding deaths.

Bronchitis, Pneumonia and other Respiratory Diseases

The mortality in 1944 and recent years has been as follows:

	Birmingham.	*England and Wales.*		*Birmingham.*	*England and Wales.*
1935	1·09	1·16	1940	2·21	—
1936	1·22	1·23	1941	1·94	—
1937	1·40	1·27	1942	1·51	—
1938	1·18	1·05	1943	1·73	—
1939	1·16	—	1944	1·40	—

The increase since 1940 is largely attributable to the change in method of coding deaths.

SECTION B.

GENERAL PROVISION OF HEALTH SERVICES

1. General Services.

(a) Laboratory facilities

I—City Bacteriological Laboratory

The work done in the City Bacteriological Laboratory is set out in detail below :

(*a*) GENERAL LABORATORY

	No. of Specimens.
Diphtheria Swabs :	
(*a*) For practitioners	4,512
(*b*) For Fever Hospital	3,603
(*c*) For virulence test	636
Swabs for staphylococci	140
Swabs for streptococci	1,670
Fæces	4,307
Milks	1,261
Milk for tuberculosis	2,522
Precipitin tests	423
Sputum for tuberculosis	1,801
Shell-fish	35
Water samples	825
Widal's reaction	2,022
Coagulase tests	114
Miscellaneous	7,062
TOTAL	30,933

(*b*) VENEREAL DISEASES LABORATORY

Blood for Wassermann reaction	35,009
Cerebro-spinal fluid—	
(*a*) For Wassermann reaction	1,051
(*b*) For cell count	292
Films for gonorrhœa	15,650
Urine examinations: (chemical)	8
,, ,, (microscopical)	1
Gonococcal fixation tests	5,188
Vaccines prepared	369
Cultures prepared	12,435
Van den Bergh's tests	69
Serum for spirochaetes	3
Kahn tests	50,000
TOTAL	120,075

II—City Analytical Laboratory

The following statement indicates the samples analysed in the City Analyst's Department :

Samples Analysed :	
Food and drug samples	5,392
Soot gauge samples	24
Fertilisers and feeding stuffs	22
Miscellaneous samples	943
TOTAL	6,381
Samples Adulterated, etc. :	
Samples adulterated	369
False labels	28
Number of vendors of incorrect samples	250
Number of prosecutions	16
Number of fines	16
Amount of fines and costs	£100/5/6
Number of cautions	241

Details of this work are given in the Report of the City Analyst, printed separately.

III—Hospital Laboratories

Laboratories are provided at :

Dudley Road Hospital : General and biochemical.

Selly Oak Hospital : General and biochemical.

Little Bromwich Hospital : Bacteriological, infectious diseases.

Yardley Green Road Sanatorium : Bacteriological, etc., tuberculosis.

Carnegie Institute : General and biochemical.

(b) Ambulance Services

The Public Health Committee have four ambulances for acute infectious diseases (Little Bromwich Hospital) and two for tuberculosis. The ambulance services for the general hospitals are supplied through the Birmingham Hospitals Contributory Association in conjunction with the St. John Ambulance Brigade.

The Watch Committee have eight police ambulances for accidents and other casualties.

There are also ambulances at some of the large voluntary hospitals and at certain works.

(c) Nursing in the Home

Arrangements have been in force, over a period of years, for the home nursing of a number of conditions by the district nurses of the Birmingham District Nursing Association, and 507 cases were thus nursed during 1944. This figure includes 360 cases of pneumonia and 129 of puerperal pyrexia, and 44 children under five years old are included in the total of 507 cases.

Apart from hospital treatment, cases of ophthalmia neonatorum and of other forms of ophthalmia or eye injury capable of leading to blindness

are visited in their homes, as far as necessary, by nurses from the Eye Hospital, an annual grant being paid to the hospital in respect of this service.

Removal of Aged and Infirm

During 1944, 26 cases were investigated with a view to possible removal to an institution under either Section 38 of the Birmingham Corporation (General Powers) Act, 1929, or Section 48 of the 1935 Act. Nine of the cases were voluntarily admitted to institutions or otherwise relieved, and 15 failed to fulfil the requirements of either section. In 2 cases it was found necessary to obtain a Magistrate's Order under Section 38 for removal to an institution.

As stated in previous reports, the problem of providing suitable care for aged persons in their own homes is an increasingly pressing one. The Ministry of Health Circular 179/44, authorising the provision of domestic help for a variety of cases, gives scope for the alleviation of this position when a sufficiency of domestic helpers becomes available.

(d) Treatment Centres and Clinics

Anti-Tuberculosis Centre. (See page 85).

Maternity and Child Welfare Centres. (See page 26).

Public Dispensaries (Voluntary).

Dispensaries for the treatment of the sick poor are provided by six different voluntary societies in the City, chief among which is the Birmingham General Dispensary. This latter, with different branches, treated 32,261 patients during the year, while the others provided treatment in a lesser proportion.

(e) Hospitals

PUBLIC GENERAL HOSPITALS

General Statistics

The statistics relating to the work of Dudley Road and Selly Oak Hospitals and Selly Oak Infirmary are given below.

(*a*) IN-PATIENTS

	Acute Sick.		*Chronic Sick.*
	Dudley Road Hospital.	*Selly Oak Hospital.*	*Selly Oak Infirmary.*
*Total number of admissions (including infants born in hospital)	17,898	9,942	3,088
Number of women confined in hospital	3,316	879	—
Number of live births	3,273	842	—
Number of stillbirths	97	55	—
Number of deaths among the newly-born (under four weeks, born in hospital)	91	38	—
*Total number of deaths	1,120	415	1,228
*Total number of discharges (including infants born in hospital)	16,751	9,573	1,835

* Excluding E.M.S. cases and service casualties.

(*b*) OUT-PATIENTS

	Acute Sick.		*Chronic Sick.*
	Dudley Road Hospital.	*Selly Oak Hospital*	*Selly Oak Infirmary.*
Number of persons seen in out-patient department	23,016	17,792	*Run in conjunction with Selly Oak Hospital.*
Total number of attendances	105,462	78,167	
Number of women seen at ante-natal clinic	3,774	822	
Total attendances at ante-natal clinic	11,379	6,309	

Dudley Road Hospital

This is a municipal general hospital for the acute sick, and is situated in the north-western portion of the City.

Dr. T. M. Anderson, Medical Superintendent of the Hospital, reports as follows:

During the current year, more than 1,500 patients per month were admitted to this hospital, and the total admissions for the year exceed by more than 2,000 the 1943 figure. This, in fact, represents the highest number of patients ever treated in Dudley Road Hospital, and constitutes a record. The remarkably steady annual increase of patients seeking admission to this hospital has shown itself in the last twenty years. For example, in 1924, 9,577 patients were admitted; in 1944, 19,236 in-patients, or rather more than double the original figure were treated in our hospital wards. Some credit must surely go to the medical and nursing staff for this fine effort.

E.M.S. admissions in 1939 were only 40. This figure has now risen to 1,338, which includes the regular convoys of service sick and wounded from overseas.

The new Maternity Department, with its 125 beds, in its first complete year, has been used to its maximum capacity, and no less than 4,079 maternity cases were admitted, and 3,316 confinements undertaken. This represents 1,272 more confinements than in 1943. Deaths of infants under ten days were 87—two less than in 1943, and the deaths from prematurity have fallen from 69 to 53. Fourteen of the infant deaths were due to serious abnormalities and eight due to neo-natal infection—a particularly low figure. Results in the cases of premature infants were greatly improved; 259 infants of less than 5½ lbs. were born in the hospital, of which 53 died. Babies between 3 and 3½ lbs. show a 50 per cent. survival rate, whereas of those over 3½ lbs. more than 90 per cent. were saved. During the year, the department continued to book cases to full capacity; in addition, emergency cases in labour and many other patients who had made no arrangements for their confinement were taken into hospital. The ante-natal clinics still continue to be crowded despite an increase to six sessions weekly. The total ante-natal attendances were 11,379, of which 3,771 were new bookings or consultations.

The necessity for occupational therapy, suitably graded, for the rehabilitation of acute medical and surgical cases is now recognised, and Miss Davies was appointed occupational therapist in November, 1944. It is hoped that this department will be extended in due course.

Miss Snowden, Matron-in-Chief, reports that the nursing services of the hospital have been very strained because of the shortage of staff-nurse grade. Relief for sisters' holidays has had to be carried out by third-year probationers, and the situation in this respect is still very weak. We actually have no trained staff nurses in the general wards of the hospital. The situation with regard to the staff of the maternity department, which, in the early part of this year, was very serious, has now been relieved. The Pre-Nursing School has continued to be satisfactory, and we are recruiting for nurses without advertising.

I have to congratulate all members of the staff on their fine spirit of co-operation and energy which has carried us through this record year.

The attached figures give, in more detail, the work done during 1944.

Duration of Stay	*Excluding E.M.S.*	*Including E.M.S.*
Under four weeks	16,276	17,159
Four weeks and under thirteen weeks	1,445	1,723
Thirteen weeks or more	150	189
Average number of beds occupied		748·3
Highest number, on 16th October, 1944		991
Lowest number, on 13th January, 1944		746
Operations		
Number of major operations		4,807
(Minor and dental operations excluded)		plus 849 Bloods taken
Out-Patients		
Total number of Out-Patients	23,016	23,998
Total attendances	105,462	109,709
Ante Natal Clinic (Mothers)	3,774	—
Ante Natal Clinic (Attendances)	11,379	—

SPECIAL DEPARTMENTS.

Pathological Department	
Examinations	13,924
Autopsies	539
Bio-Chemical Department	
Examinations	15,010
Radiological Department	
Radiographic examinations	27,073
Fluoroscopic examinations	4,122
Examinations (patients)	11,751

These figures include 1,621 opaque meal examinations, 255 opaque enema examinations, 23 oesophageal examinations, and 632 examinations for pregnancy.

Massage and Electro-therapeutic Department	
Cases	5,374
Dental Department	
Attendances	1,155

Selly Oak Hospital and Infirmary

This is a municipal general hospital for the acute sick, and its adjoining infirmary accommodates chronic sick. Both are situated on the border of Bournville, in the southern sector of the City.

Mr. H. Carson, Acting Medical Superintendent, reports as follows :

The pressure on the available beds of the hospital has been continuously severe throughout the year, and there has frequently been a dangerous degree of overcrowding in the wards which has caused considerable anxiety to the Medical and Nursing Staffs. Ward infection has been all too frequent. The ear, nose and throat work has continued to increase, and has reached almost unmanageable proportions. The lack of proper isolation facilities and barrier wards for children, and the impossibility of segregating the ear, nose and throat cases, which are often of a highly infective nature, have been important factors in ward infection. A ward in the hospital has been continuously closed since February to enable repairs to ward ceilings throughout the hospital, necessitated by bomb damage, to be carried out. These repairs will not be completed for many months.

In the autumn, owing to the shortage of beds and the pressure on our accommodation by civilian cases, we were unfortunately compelled to discontinue the admission of battle casualties.

The accommodation for the chronic sick in the Infirmary section has also been severely tested and particularly during the winter months. Acute and sub-acute cases have frequently to be admitted to the Infirmary owing to the lack of beds in the hospital.

The scheme of extensions passed by the Committee in 1938, which would have provided the accommodation so urgently needed, unfortunately failed to materialise, owing to the advent of the war, and it will be realised that the position has now become exceedingly difficult.

An appointments system for out-patients was inaugurated in September last to minimise inconvenience to patients and to reduce the overcrowding and congestion in the out-patient department. I am glad to report that this scheme is now working satisfactorily and the objects aimed at have been attained. Further improvements in our out-patient arrangements can, of course, be effected when more trained clerical staff and better accommodation are available.

The following figures give some indication of the work done during the year.

Selly Oak Hospital

Total admissions	10,437
Number of Discharges	10,049
Number of deaths	427

Duration of Stay

Under four weeks	9,412
Four weeks and under thirteen weeks	956
Thirteen weeks or more	108
Average number of beds occupied	406

Operations

Number of major operations	4,408

Special Departments

Pathological Department

Examinations	20,291
Autopsies	381

Bio-chemical Department

Examinations	6,150

Radiological Department

Radiographic Examinations	21,799
Fluoroscopic Examinations	2,475

Physio-therapy Department

Cases	4,800

Dental Department

Attendances	1,211

Selly Oak Infirmary

Total admissions	3,146
Number of discharges	1,879
Number of deaths	1,240

Duration of Stay

Under four weeks	2,028
Four weeks and under thirteen weeks	785
Thirteen weeks or more	306
Average number of beds occupied	614

REPORT ON
MATERNITY AND CHILD WELFARE

CHIEF STATISTICS, 1944

Birth Rate 22·8 per 1,000 population.

Illegitimate Birth Rate, 6·4 per cent. of total live births.

Infant Mortality Rate, 42 per 1,000 live births.

Stillbirths, 25 per 1,000 live and still births.

Neo-natal mortality, 22·2 per 1,000 live births.

Maternal Mortality in Childbirth :

(including deaths from abortion) 1·34 per 1,000 live and still births.

(excluding deaths from abortion) 0·95 per 1,000 live and still births.

GENERAL COMMENTS

Births

The birth-rate has again shown a rise from 20·9 in 1943 to 22·8 in 1944. The birth-rate for England and Wales was 17·6.

The illegitimate birth-rate has also risen to 6·4 per cent. of the total live births.

The figures for illegitimate births in recent years are as follows :—

	Illegitimate Births per 1,000 live births.		*Illegitimate Births per 1,000 live births.*
1935	33·3	1940	36·8
1936	33·7	1941	48·2
1937	37·0	1942	54·3
1938	40·0	1943	57·6
1939	36·1	1944	64·1 ·

Infant and Child Mortality

Infant Mortality. The infant mortality rate for 1944 was 42. This is once again a low record, being 13 per 1,000 less than the previous lowest record of 55 in 1943. The trend in recent years is shown in the table below :

INFANT MORTALITY RATE

	Birmingham.	*England and Wales.*		*Birmingham.*	*England and Wales.*
1935	64	57	1940	70	55
1936	62	59	1941	69	59
1937	60	58	1942	56	49
1938	61	53	1943	55	49
1939	60	50	1944	42	46

Neo-natal Mortality. The neo-natal mortality was 22.2 per 1,000 which is the lowest figure recorded for Birmingham.

	Rate per 1,000 *live births.*
1937	31·0
1938	26·6
1939	26.3
1940	28·8
1941	29·1
1942	30·1
1943	25·7
1944	22·2

Stillbirths. The stillbirth rate was 25 per 1,000 live and still births, which is again a new low record as the following table will show :—

	Rate per 1,000 *Total Births.*
1937	35
1938	35
1939	36
1940	33
1941	29
1942	28
1943	27
1944	25

Infant Mortality—Illegitimacy. The following figures show the relative mortality for legitimate and illegitimate infants for the past year :

	Infant Mortality per 1,000 *live births*
Legitimate	41
Illegitimate	62

General Comments on Child Mortality. It is a cause for great satisfaction that the infant mortality rate and stillbirth rate continue to fall, while at the same time the birth rate continues to rise. The sharpest fall in the infant death rate is in the age period, one to twelve months, where there has been a fall as compared with 1943 of no less than 10 per 1,000. The fall has been most marked in the deaths from diarrhœa and enteritis, although there has also been a satisfactory fall in the deaths from bronchitis and pneumonia, and infectious disease.

The causes of stillbirth and of deaths of children up to the age of 4 weeks are usually related to the health of the mother during pregnancy, or to the course of labour. 23·7% of the stillbirths were due to ante-natal causes and approximately half of these (13·8%) were due to toxæmia. The percentage of stillbirths due to toxæmia shows a slight rise over that for 1943. The percentage of stillbirths due to foetal abnormality (15·7%) was less than that for 1943. In 10·6% of the cases, prematurity was the sole cause of the stillbirth, and in 12·7% of cases the cause was unknown.

When the causes of neo-natal death are analysed, it is found that prematurity is the greatest single cause of death (26·2%), although birth injury (20·5%) and fœtal abnormality (19·7%) follow closely. Infection caused approximately 12% of the deaths.

Although the stillbirth and neo-natal death rates are the lowest ever recorded in Birmingham, there is still great room for improvement. With good economic conditions and first-class medical and nursing care, it has been found possible elsewhere to achieve a stillbirth rate of 11 per 1,000—a rate less than half of that achieved in Birmingham in 1944—and a neo-natal death rate of between 5 and 10 per 1,000, again less than half of the best rate achieved by Birmingham.

Prematurity, as always, has laid a heavy toll on infant life. Although the immediate cause of death was not always the prematurity itself, yet the premature baby is always more vulnerable to injury and infection than the full-time infant, so that we find that 44% of the stillbirths, and 57% of the neo-natal deaths occurred in the prematurely born.

	1944	1943
Percentage of total births prematurely born	6·3	6·3
Percentage of live births prematurely born	5·3	5·4
Percentage of stillbirths prematurely born	44·2	41·4
Percentage of neo-natal deaths prematurely born	57·3	58·7

	Premature Infants.		*Full-time Infants.*	
	1944.	1943.	1944.	1943.
Stillbirth rate	175	173	15·1	16·7
Neo-natal death-rate	200	229	9·3	11·1

The above tables show that risk of a premature infant being stillborn was twelve times greater than if born at full term, and that if born alive the risk of death before the end of four weeks, was twenty times greater. Effort must be primarily directed to the prevention of prematurity, by improvement in the health and in the care of the expectant mother. Secondly, adequate arrangements must be made for the care of the premature baby when born. These arrangements should include provision of 4 cots per 1,000 births, together with premature baby outfits, which can be issued for the nursing of those premature babies who can safely be cared for in their own homes. All babies under 4½ lbs., born at home, should be nursed in hospital. Sixty outfits for use on the district have already been provided and plans are under consideration for extending the hospital accommodation for premature babies.

Maternal Mortality in Childbirth

The deaths of women, classed to pregnancy and child-bearing in Birmingham during 1944, gave a maternal mortality of 1·34 per 1,000

live and stillbirths. If deaths from abortion are excluded, the rate is 0·95 per 1,000 live and stillbirths. This is again a new low record.

	Rate per 1,000 *Live and Still births*	
	Birmingham.	*England and Wales*
1935	3·40	3·93
1936	3·53	3·65
1937	2·96	3·11
1938	2·71	2·97
1939	2·49	2·82
1940	1·74*	2·16*
1941	1·95*	2·23*
1942	1·82*	2·01*
1943	1·35*	1·84*
1944	0·95*	1·53*

* excluding deaths following abortions.

As the result of enquiry it was found that the maternal deaths in 1944 were such that the proportion

(*a*)	*Due to pregnancy and childbirth* :	
(i)	Not associated with a notifiable birth was	20%
(ii)	Associated with a notifiable birth was	45%
	TOTAL	65%
(*b*)	*Due to associated conditions was*	35%

In 50% of the cases, it was considered that death might have been avoided had there been better ante-natal care and obstetric facilities, together with more intelligent co-operation on the part of the patient.

Puerperal Sepsis and Puerperal Pyrexia

The following table shows the number of cases of puerperal pyrexia during 1944 and the preceding four years.

The out-of-city cases are those not normally resident in Birmingham, but coming into the City for confinement.

	1940	1941	1942	1943	1944
Total puerperal pyrexia	292	290	381	396	352
Out-of-City cases	17	20	22	25	20
Birmingham cases	275	270	359	371	332

The 332 Birmingham cases of puerperal pyrexia have been analysed as far as possible, with a view to discovering the cause of the pyrexia. The causes were found to be as follows :—

1. Infection of the genital tract (Including 26 cases of septic abortion)	161
2. Extragenital causes	141
3 Cause unknown	30

There were 12 maternal deaths from sepsis ; 8 of these following abortion and 4 following childbirth.

Ophthalmia Neonatorum

There have been 964 cases of ophthalmia neonatorum during the year, and 3 were treated in hospital. Only a very small proportion of these were due to gonococcal infection, and there was no impairment of vision in any case notified during the year.

Pemphigus

Number of cases of pemphigus which occurred on the district during 1944	13
Admitted to hospital	2
Nursed at home :—	
(*a*) by district nurse	8
(*b*) by relative	3

Of these 13 cases, 12 recovered and 1 died.

Only 1 case occurred in an institution (Dudley Road Hospital); it recovered.

MATERNITY SERVICES

The births occurring in the City during the year were as follows :—

	Live.	*Stillbirths.*
Births notified	22,991	685
Failed to notify	208	2
	23,199	687

Total : 23,886*

*This figure does not include Birmingham confinements occurring outside the City, nor births in St. Chad's Hospital, but does include the confinements of a number of persons whose residence was outside Birmingham.

Medical practitioners were engaged in 22·6% and called in for 3·4% of the domiciliary confinements, in respect of which midwives alone attended 74% ; and 47·7% of all confinements in the City occurred in institutions.

The following table gives details of the place of confinement.

Domiciliary Midwifery

Attended by midwives only	9,019
Doctor booked for confinement	2,757
Doctor called in for confinement by midwife	420
	12,196

INSTITUTIONAL MIDWIFERY.

Total births in	Nursing Homes	1,680
,, ,, ,,	General Hospital	49
,, ,, ,,	Hope Lodge	44
,, ,, ,,	The Infirmary, Winson Green Road	3
,, ,, ,,	Queen Elizabeth Hospital	527
,, ,, ,,	Sorrento Maternity Home	1,378
,, ,, ,,	Heathfield Road ,, ,,	731
,, ,, ,,	Lordswood ,, ,,	780
,, ,, ,,	Maternity Hospital	1,729
,, ,, ,,	Dudley Road Hospital	3,316
,, ,, ,,	Selly Oak Hospital	888
,, ,, ,,	Winson Green Mental Hospital	2
		11,127

Domiciliary Midwifery

At the end of 1944, 127 City Midwives were in practice, also 1 part-time relief Midwife and 7 midwives who were used as maternity nurses. Thirty-one independent midwives were in practice (including 7 who resided outside the City), 6 midwives worked under the Maternity Hospital and the (former) Queen's Hospital Districts, and 11 under the Birmingham Hospital Contributory Association.

A total of 12,196 women were delivered in private houses, 10,689 by City Midwives, 552 by midwives attached to the Maternity and the (former) Queen's Hospital Districts, 797 by private midwives. There were 158 confinements attended in patients' homes or in ambulance by Ambulance midwives.

City Midwives

During the year, City midwives attended 10,689 cases, acting as maternity nurses in 2,280 of these cases. The average number of deliveries per month per midwife was 7, or 84 cases per year. This makes no allowance for 259 weeks lost by sick leave. There have been 15 resignations and 28 appointments during the year.

Supervision of Midwives

During the year 1944, 350 midwives notified their intention to practise in the City. Of these 7 resided outside the City, and therefore, did not come under routine inspection.

Midwives sent for medical help in 3,305 cases ; for the mothers in 2,159 instances, and for the child in 1,146.

Reasons for sending for Medical Help

Mothers.		*Children.*	
Delayed labour	410	Ophthalmia	827
Laceration of perineum	1,005	Prematurity	37
Haemorrhage	162	Convulsions	2
Adherent placenta	56	Jaundice	25
Abnormal presentation	65	Deformity	38
Abortion or miscarriage	25	Skin eruptions	24
Rise of temperature	126	Other causes	193
Other causes	310		
TOTAL	2,159	TOTAL	1,146

Midwives were temporarily suspended for the following reasons: influenza, 10; bronchitis, 3; gastritis, 4; septic conditions, 5; accidents, 5; other causes, 28.

The following visits were paid during the year by the supervisors of midwives.

Routine visits to midwives	130
Special visits to midwives	485
Visits to stillbirths	71
Visits after neo-natal deaths	70
Nursing and deliveries supervised	125
Visits to ophthalmia neonatorum cases	1,521
Visits to puerperal sepsis cases	126
Other visits	497
Unsuccessful visits	666
Number of interviews with midwives	1,617
Hospital interviews	4,129
Interviews re dockets for sheets (last quarter of 1944)	274

Emergency Maternity Service

This is a service whereby a doctor and nurse from the Maternity Hospital proceed to the patient's home by ambulance with equipment for the treatment of shock and hæmorrhage. A consultant can also be called by the general practitioner, if he thinks it advisable.

This service was used for the domiciliary treatment of 61 cases in 1944 (58 cases of hæmorrhage and 3 cases of shock, 2 of the latter being associated with inversion of the uterus).

One patient was moribund when the ambulance arrived and died just as the transfusion was being commenced.

Training of Midwives

The City Hospitals (Dudley Road and Selly Oak) and the City Maternity Home (15, Wake Green Road), together with the Birmingham Maternity Hospital, are recognised for the first period of training; while the City Maternity Home (Heathfield Road), is recognised for the second period of training.

	Pupils for the Central Midwives' Board Certificate		*Gas and Air Certificate.*
	Part I.	*Part II.*	
Selly Oak Hospital	21	—	—
Dudley Road Hospital	44	—	5
Birmingham Maternity Hospital	75	—	41
Wake Green Road Maternity Home	36	—	14
Heathfield Road Maternity Home	—	73	28

District Training

During the year 1944, 4 midwives were recognised as teachers, making a total of 17 teachers. Three teacher midwives resigned during the year. Seventy-three pupils were dealt with by these midwives for part of their training.

Evacuation of Expectant Mothers

During 1944, 274 mothers were evacuated to the hostel provided by the Warwickshire Public Health Authority.

These mothers are sent by special transport to the hostel in the reception area two or three weeks before their confinement is due. They are then admitted to local maternity homes or hospitals for the confinement, after which they return home.

Evacuation has increased during 1944 owing to the large number of applications received for hospital delivery. The beds available in the Warwickshire area have considerably relieved the pressure on accommodation in Birmingham.

City Maternity Home (Sorrento), Wake Green Road, Moseley. (112 Beds).

This Home is a training school for pupil midwives (first period of training).

In September a post-delivery annexe (24 beds), was opened at Greenhill Road, and the institution as a whole now has 64 lying-in beds, 30 ante-natal beds, and a premature baby unit with cots for 14 babies and beds for 4 mothers. Suitable patients are transferred by ambulance to the post-delivery home 2—4 days after delivery.

The number of deliveries in the home during 1944 was 1,378 ; of these, 1,046 were booked, and 332 unbooked cases. Seventy-six per cent. were primigravidæ. Six cases developed a notifiable pyrexia and one breast abscess occurred during the year. There were three maternal deaths, all due to associated causes.

There have been no epidemics of any kind amongst the infants.

The Premature Baby Ward has been full throughout the year, and as usual a great many infants have had to be refused admission owing to the limited accommodation available.

City Maternity Home, Heathfield Road, Handsworth. (43 Beds)

This home is a training school for midwives (second part of the training). The institution works in conjunction with Bourne House annexe (14 beds), and has a total of 33 lying-in beds, and 10 ante-natal beds.

The number of deliveries in the Home during 1944 was 731 ; of these 664 were booked and 67 unbooked cases. Seventy-five per cent. were primigravidæ.

Five cases developed a notifiable pyrexia, and two breast abscesses occurred during the year. There were no maternal deaths and no epidemics amongst the infants.

City Maternity Home, Lordswood Road, Harborne. (27 Beds)

This Home is intended for women who have had a previous child, but require institutional treatment because of home difficulties.

Ante-natal and post-natal clinics in connection with this Home are held at the Harborne Welfare Centre in Wentworth Road.

There are no ante-natal beds, but abnormal ante-natal cases are dealt with by the Wake Green Road Home.

During 1944 there were 780 deliveries. These were all booked cases, and ninety-six per cent. were multigravidæ.

Ten cases developed a notifiable pyrexia, and a breast abscess occurred in one case. There were no maternal deaths and no epidemics amongst the infants.

MOTHERS

Maternity Ward.	*Sorrento.*	*Heathfield.*	*Lordswood.*
No. of confinements	1,378	731	780
Booked	1,046	664	780
Unbooked	332	67	—
Primiparae	1,054	552	32
Multiparae	324	179	748
Puerperal pyrexia	6	5	10
Maternal deaths	3	—	—
Forceps delivery	81	61	8

INFANTS

	Sorrento.	*Heathfield.*	*Lordswood.*
No. of births	1,417	742	794
Stillbirths (booked)	40 } 58	18 } 20	7
(unbooked)	18 }	2 }	—
Deaths in first 10 days :			
(booked)	18 } 30	10 } 12	5
(unbooked)	12 }	2 }	—

	Sorrento.	*Heathfield.*	*Lordswood.*
Ophthalmia neonatorum	27 (*all very slight*)	5	2
Septic spots	20	13	8
Premature births (Live and still)	146	45	23

CLINICS

(1) Antenatal			
Doctors' Clinics.	*Sorrento.*	*Heathfield.*	*Lordswood.*
New patients	1,541	1,100	877
Re-visits	5,782	3,653	2,437
Consultation cases	223	346	—
Midwives	601	1,149	—
(2) Postnatal			
New patients	714	482	516
Re-visits	292	266	43

At the request of the Tuberculosis Officer, the ante-natal care has been undertaken of tuberculous pregnant women receiving sanatorium treatment. Visits have been paid during 1944 to 17 women, by the Senior Medical Officer attached to the Maternity Homes.

Inspection and Registration of Nursing Homes

At the end of 1944, there were 34 nursing homes on the register. One new home, with 8 maternity beds, opened during the year. Five homes formerly used for medical and maternity cases and 1 for surgical and maternity cases now only take maternity cases. Four homes have registered extra beds. One home has changed hands and another is in the process of changing hands. Four new homes, all for chronic medical cases, are in process of registration.

The total number of visits paid to nursing homes during the year 1944 were 100. (87 by medical officers and 13 by supervisors of midwives).

Total number of beds in homes	393
Number of homes which are equipped for surgical work	7
Number of homes which take chronic or senile cases only	14
Number of Homes which take maternity cases only	14*
Number of homes which keep some beds for maternity cases	5†

* with 84 beds. † with 24 beds.

HEALTH VISITORS' TRAINING COURSE, 1944-45

The twenty-second course of training for the Health Visitors' Certificate commenced on Monday, September 4th, 1944, and terminated on Wednesday, April 18th, 1945. Students went to London to take the Health Visitors' Examination of the Royal Sanitary Institute. This is the first time that students have been required to take the examination in London ; in previous years the examination was held in Birmingham. The change of Examination Centre had been made at the request of the Ministry of Health, the object being to reduce the number of examining centres in the country. As this decision involves students in considerable additional expenditure in respect of travelling and hotel expenses, the Maternity and Child Welfare Committee have agreed, under the exceptional circumstances of the present year, to assist Birmingham candidates by allowing £3 10s. 0d. per student for expenses incurred during the examination days.

The response to the advertisement for students was much below the pre-war level and recruiting was adversely affected by the restrictions imposed by the Ministry of Labour and National Service. Only candidates between the ages of 27 and 34 years were allowed to apply and these were only allowed to take the training if they had completed one year in the special fields of nursing where qualified nurses were more urgently needed.

The Course has followed the usual lines, but greater difficulty has been experienced in arranging visits of observation. A group of 35 students is too unwieldy for observation purposes, and many visits have been duplicated.

The Work of the Health Visitor

Health visiting in the home has proceeded along the usual lines as far as practicable, i.e., as soon after the fourteenth day as possible, monthly to twelve months, quarterly between 1 and 2 years, and half-yearly between 2 and 5 years.

The work has also included visits to ante-natal mothers, and to cases of ophthalmia neonatorum and scabies. The home visiting was interrupted considerably by the additional work which resulted from the evacuation of children to Birmingham from the London area during July and August, and the subsequent " follow up " work entailed. Health visitors have also undertaken additional work in connection with Health Education.

It is therefore scarcely surprising that the total number of home visits show a decline of 41,152, in spite of the fact that the number of individual children visited has increased by 7,529. Although a larger number of children were visited, especially in the younger age groups, the average number of visits per child was less, particularly in the older age groups. This is reflected in the centre attendances which show that a larger percentage of children under the age of one year attended the centre, i.e., 82·8 per cent. in 1944 as compared with 80 per cent. in 1943. On the other hand, the attendance of children born in the years 1940 and 1941 shows a falling off. There is no doubt that the reason for this is that the health visitors, owing to great pressure of work, have been unable to pay as many home visits to these older children as heretofore. The fact that 2,215 children between the ages of two and five years are on the attendance roll of the Nurseries also contributes to the diminution in the number of children between these ages attending the Centres.

This does not mean that the pressure of work at the Centres has in any way diminished. As has already been shown, the visited child population has shown an increase of 7,529 in 1944 over 1943, and in consequence there has been an increase in the number of individual children attending the Centres and in their total attendance.

As was pointed out in last year's report, it is considered that for effective work a health visitor engaged solely in health visiting, should not be responsible for more than 500 children under the age of five years.

In 1943, we had one health visitor for every 717 children under five years. In 1944, owing to the increase in the child population, this has risen to 845.

The following tables illustrate the remarks made above.

CHILD POPULATION VISITED

1937	66,538	1941	65,259
1938	69,698	1942	70,008
1939	70,289	1943	75,310
1940	67,826	1944	82,839

Of these 82,839, approximately one-quarter (21,070) were children born in 1944.

Total number of visits to children under 5 years	272,731
,, ,, ,, ,, expectant mothers	20,785
,, ,, ,, ,, post-natally following stillbirths and neo-natal deaths	720
,, ,, ,, ,, scabies and other visits	20,672
	314,908

Children Visited in 1944

Number of individual children visited	82,839
,, ,, ,, ,, who attended Centres	47,008
Percentage of visited children who attended Centres during the year	56·7 %

Age.	*No. visited during* 1944.	*No. attended Centre*, 1944.	*% attending Centre*, 1944.
4—5 years	13,158	4,900	37·2
3—4 years	13,787	4,118	29·9
2—3 years	16,440	6,698	40·7
1—2 years	18,384	13,831	75·2
0—1 year	21,070	17,461	82·9

Maternity and Child Welfare Centres

Number of Centres provided and maintained by the Council	32
Total number of attendances at Child Welfare Centres during 1944 :	
(1) By children under 1 year of age	232,945
(2) ,, ,, between 1 and 5 years	69,101
Total number of children who attended for first time during the year, and who were at the time of their first attendance :	
(1) Under 1 year of age	19,787
(2) Between 1 and 5 years	3,393
Total number of individual children who attended during the year, and who were at the end of the year :	
(1) Under 1 year of age	17,461
(2) Between 1 and 5 years	29,547

The distribution of National Dried Milk and Vitamins has been carried out by clerks from the Food Office. The change from Wright Street Church Schools to Wordsworth Road has been a very great improvement and a source of great encouragement to all the workers at this Centre. The comfort of the mothers has also been greatly increased.

There continues to be a great shortage of voluntary helpers, and 77 sessions a week are without their full quota of voluntary workers. This makes the work of the health visitors still more arduous.

The increase in the work at the Centres is shown in the table below :—

Children's Attendances :	1943.	1944.	*Increase.*
Individual children attending	43,362	47,008	+3,646
Total attendances made :			
At infant clinics	199,802	218,778	+18,976
At postnatal clinics	59,359	61,982	+2,623
At medical inspections of children of 2—5 years	20,487	21,286	+799
Total children's attendances	279,648	302,046	+22,398

Mothers' Attendances :	1943.	1944.	*Increase.*
New mothers at antenatal clinics	15,115	15,049	—66
Total individual women attending	18,866	19,340	+474
Total antenatal attendances	83,817	87,456	+3,639
Individual Mothers examined at :			
Postnatal clinics (new mothers)	3,736	4,653	+917
Total postnatal examinations	3,996	5,021	+1,025

Antenatal Clinics at Child Welfare Centres

The average number of antenatal clinics held weekly is 72, with an average attendance of 24. The number of individual women attending has increased by 474, and the total attendances by 3,639.

Antenatal Clinics

Number held	3,662
New mothers attending	15,049
Total attendances	87,456

Antenatal Clinics are also held at Dudley Road Hospital and Selly Oak Hospital, at the Maternity Hospital, and at the City Maternity Homes, to all of which consultation cases can be referred.

Postnatal Clinics

These clinics have proceeded as usual.

The mother is invited to attend with her baby until the infant is three months old. She receives her own physical examination between the sixth and eighth week after confinement. The total number of primary postnatal examinations at Postnatal and Antenatal Clinics was 4,653, an increase of 917 over 1943, and representing 24% of the women attending antenatal clinics. Many of the women attending antenatal clinics at the Welfare Centres are examined postnatally at the Hospital or Maternity Home at which they were confined or by the private doctor who attended them.

The following table shows the result of these examinations :—

No. of cases showing no abnormality	1,678
No. of cases showing abnormality	2,975
% of cases showing abnormality	64%

Abnormal conditions found in mothers :

Breasts—Mastitis	57
Genital tract	2,506
Urinary tract	113
White leg	7
General conditions	2,401
Other conditions	404

NOTE.—More than one abnormality may be found in the same mother.

Postnatal Clinic Attendances

Number held	1,462
Number of individual mothers examined	4,653
Total examinations made	5,021
Number of new infants attending	11,094
Total number of infants' attendances	61,982
Number of infants seen by doctor	23,975
Average attendance of infants per clinic	42·3

Children's Clinics

Children of any age up to 5 years may attend these clinics, though mothers with babies under 3 months are encouraged to attend the postnatal clinics, and toddlers to attend the toddlers' inspection clinics.

Number of clinics held : with doctor	3,121	
without doctor	451	
	Total	3,572
New children attending		10,790
Total attendances		218,778
Total seen by doctor		67,086

Medical Inspection of Pre-school Children

These clinics are held for the medical inspection of pre-school children between 18 months and 2 years of age. Quarterly appointments are given and the mother is encouraged to keep these regularly. If more frequent supervision is considered desirable, the mother is advised to bring the child in the interim to the ordinary consultation.

The number of pre-school clinics held during the year was 1,246 and the average attendance 17.

The following table gives an analysis of the attendances and conditions found :—

MEDICAL INSPECTIONS, 1944

Section A. Numbers :			
1.	No. of clinics		1,246
2.	Total attendances		21,286
3.	No. of children attending for first time this year		8,894
4.	No. with one or more defects		6,207
5.	No. with adverse environmental conditions		2,917
6.	No. with acute illness during year		1,339
Section B. Environmental Conditions :			
1.	Clothing unsuitable or inadequate		494
2.	Rest. Bed-time later than 7 p.m.		3,773
3.	No day-time rest		5,340
Section C. Defects :			
1.	*Eyes* :	Squint	288
2.		Inflammatory conditions	105
3.		Other eye conditions	34
4.	*Skin* :	Eczema	159
5.		Purulent conditions	127
6.	*Ear, Nose and Throat* :	Otorrhœa	183
7.		Deafness	54
8.		Enlarged or diseased tonsils and/or adenoids	1,891
9.		Nasal obstruction and/or mouth breathing	357
10.	*Teeth* :	Carious or defective	1,315
11.	*Glands*		773
12.	*Heart* :	Congenital diseases	51
13.		Rheumatic heart conditions	33
14.	*Lungs*		109
15.	*Rickets* :	Active	115
16.		Rachitic deformities	1,005
17.		Other deformities	786
18.	*Mentality* :	(backward)	117
19.	*Speech* :	(backward or defective)	237

Ultra Violet Light Clinics at Child Welfare Centres

The Ultra Violet Light Clinics were held at 18 centres. The Clinics were held from January to end of April, and began again in October. The total number of attendances of 48,152 was made by 5,576 cases.

Remedial Exercise Clinics

Up to October 7th, 1944, children's remedial exercises were held at 11 centres. Since the resignation in October of one of the physiotherapists, these clinics have been held at four centres only—Erdington, Kingstanding, Trinity Road and Monument Road. Persistent efforts to obtain the services of another physiotherapist have not been successful.

Miss Dunn attends Canwell Hall on three days a week, and Heathfield Road Maternity Home for one session. The other Maternity Homes in the City have been without a physiotherapist since October.

The number of children treated has, therefore, fallen considerably in the last quarter of the year.

The number of children treated at Maternity and Child Welfare Centres during the year was :—

Individual children attending	968
Total attendances	2,525
Number of sessions held	451
Average attendances per session	5·6

Dental Treatment

	Carnegie Institute	*Stratford Road.*	*Lancaster Street.*	*Selly Oak.*	*Total.*
Number of clinics held	276	206	137	31	650
Total attendances :					
(Mothers)	4,442	3,327	2,254	351	10,374
(Children)	524	523	263	174	1,484
Local anaesthetic administered	28	13	3	2	46
Gas	1,681	1,560	959	490	4,690
No. of dentures supplied	1,029	676	472	(To Carnegie Clinic)	2,177

Owing to pressure of work there were no inspection clinics.

CENTRES	INFANTS AND CHILDREN					CHILDREN'S CONSULTATIONS					SPECIAL MEDICAL INSPECTIONS			MOTHERS' CONSULTATIONS (Antenatal)				POSTNATAL CLINICS							
	Births Reported	Primary Visits	Re-Visits	Total Visits	Antenatal Visits to mothers	Number Held	Fresh Children Attending	Total Attendances	Average per Consultation	Number seen by Doctor	Number Held	Total Attendances	Average per Consultation	Number Held	Fresh Mothers Attending	Total Attendances	Average per Consultation	Number of Clinics Held	Number of Mothers Examined	Average per Consultation	Number of Infants Attending	Average per Consultation	Number of Infants seen by Doctor	Average per Consultation
Acocks Green ...	769	749	8,311	9,060	660	122	459	8,814	72	2,285	49	964	20	103	469	2,442	24	52	178	3	1,511	29	695	13
Bromford	664	675	7,409	8,084	575	104	229	6,283	60	1,838	—	—	—	102	321	2,366	23	49	244	5	2,251	46	578	12
Carnegie Institute	1212	1148	10,903	12,051	823	199	622	12,484	63	3,096	—	—	—	204	815	4,440	22	52	193	4	2,174	42	679	13
Erdington	823	819	7,484	8,303	485	155	460	11,773	76	3,101	46	803	17	152	633	4,107	27	50	246	5	2,794	56	740	15
Floodgate Street	194	142	3,050	3,192	364	70	200	2,487	36	1,140	—	—	—	52	193	1,249	24	—	—	—	—	—	—	—
Greet	920	936	9,374	10,310	889	101	447	7,760	77	1,475	—	—	—	100	499	2,174	22	52	145	3	1,967	38	847	16
Handsworth ...	587	589	4,965	5,554	468	101	281	6,199	61	1,995	50	849	17	102	393	2,277	22	49	138	3	1,959	40	835	17
Harborne	622	532	6,535	7,067	402	48	243	3,101	65	1,089	—	—	—	24	132	701	29	—	—	—	—	—	—	—
Hay Mills	685	715	7,320	8,035	627	149	343	9,918	67	2,991	49	1,048	21	144	552	3,661	25	52	255	5	2,982	57	1,059	20
Hope Street ...	831	756	9,164	9,920	708	101	363	5,890	58	1,781	46	523	11	148	633	3,631	25	52	113	2	2,252	43	798	15
Horrell Road ...	678	648	8,717	9,365	835	101	201	6,225	62	2,267	52	1,106	21	99	318	2,156	22	50	187	4	2,052	41	680	14
Irving Street ...	421	434	5,770	6,204	326	99	430	5,597	56	2,315	21	305	15	48	214	1,200	25	—	—	—	—	—	—	—
Kettlehouse ...	594	594	6,567	7,161	520	152	271	7,287	48	2,310	46	707	15	152	482	3,367	22	48	226	5	1,919	40	1,044	22
King's Heath ...	757	778	4,979	5,757	406	151	665	8,208	55	2,382	50	921	18	102	394	2,282	22	49	62	1	2,465	50	1,119	23
Kingstanding ...	643	583	7,624	8,207	627	100	245	5,835	58	1,988	50	777	16	150	530	3,551	24	51	187	4	1,979	39	773	15
Lancaster Street...	607	595	11,357	11,952	1,079	100	303	5,683	57	1,757	49	914	19	152	847	3,382	22	51	123	2	1,659	33	784	15
Lansdowne Street	636	625	8,119	8,744	690	101	207	6,663	66	2,266	50	723	14	100	401	2,399	24	48	104	2	1,791	37	704	15
Lea Hall	584	614	10,406	11,020	778	52	236	3.450	66	1,207	48	1,008	21	100	444	2,716	27	52	176	3	2,581	50	625	12
Monument Road ...	1058	1055	12,576	13,631	777	151	423	8,171	54	2,773	51	715	14	199	602	3,835	19	49	142	3	2,070	42	801	16
Northfield...	803	771	11,729	12,500	793	101	280	7,859	78	2,244	48	770	16	100	373	1,867	19	52	126	2	2,404	46	994	19
Selly Oak	432	419	4,741	5,160	295	99	162	5,279	53	1,552	50	674	13	52	232	1 431	28	52	64	1	2,082	40	707	14
Stirchley	891	829	8,209	9,038	553	153	273	6,353	42	1,844	47	594	13	74	281	1,445	20	47	77	2	1,723	37	813	17
Stratford Road ...	702	648	8,629	9,277	1,073	99	355	6,034	61	2,242	—	—	—	99	615	3,130	32	52	182	4	1,988	38	768	15
Sutton Street ...	857	833	8,393	9,226	882	100	457	7,441	74	2,324	49	764	16	252	921	5,288	21	52	227	4	2,035	39	948	18
Tennal Road * ...	—	—	—	—	—	53	88	2,969	56	1,122	49	849	17	49	181	1,129	23	47	61	1	2,448	52	979	21
Tower Hill ...	937	913	8,939	9,852	647	152	581	10,706	70	3,630	49	905	18	152	441	3,592	24	51	307	6	1,590	31	799	16
Treaford Lane ...	779	760	8,904	9,664	510	151	414	10,086	67	3,179	49	952	19	101	548	3,317	33	52	244	5	2,421	47	629	12
Trinity Road ...	729	664	5,232	5,896	517	153	446	8,392	55	2,321	50	967	19	148	631	3,750	25	51	252	5	1,975	39	899	18
Washwood Heath...	798	826	9,458	10,284	873	102	376	5,275	52	2,373	49	1,017	21	104	603	3,449	33	48	99	2	1,611	34	800	17
Weoley Castle ...	405	376	5,120	5,496	550	50	103	2,400	48	1,080	51	736	14	54	231	1,482	27	51	111	2	1,613	32	956	19
Wordsworth Road	1037	992	12,219	13,211	1,364	101	298	7,122	71	2,049	49	675	14	152	804	3 869	25	51	360	7	2,943	58	975	19
Yardley Wood ...	716	687	8,823	9,510	689	101	329	7,034	70	1,070	49	1,020	21	92	316	1,771	19	50	76	2	2,743	55	947	19
TOTALS ...	22,371	21,705	251,026	272,731	20,785	3,572	10,790	218,778	61	67,086	1,246	21,286	17	3,662	15,049	87,456	24	1,462	4,905	3	61,982	42	23,975	16

* Included in Harborne figures

Treatment of Ear, Nose and Throat and Eye Conditions

Cases referred from Maternity and Child Welfare Centres and examined during 1944 at the Children's Hospital for the treatment of the above conditions were :—

Eye, ear and throat cases	316
Tonsils and adenoids (operations performed) (including 224 cases sent from the Lancaster Street Clinic).	267
Tonsils and adenoids (examination only)	76

The special fortnightly clinic at Lancaster Street Centre has continued during 1944, with the exception of a short period during December, when it had to be suspended owing to illness of the Medical Officer. Seven additional clinics were held to deal with an increased number of children referred.

Number of clinics held	33
Number of children attended	529
Number of children referred to hospital	266
Number of children operated on from this clinic	224
Number of children receiving palliative treatment	42
Cases of otorrhoea	37
Post-operative cases seen	26

Parents' Guidance Clinic

During 1944, 45 sessions of the Clinic were held with a total attendance of 183.

Girls	42 attendances
Boys	72 ,,
Mothers	51 ,,
Fathers	18 ,,

Two parents and 39 children attended the Clinic for the first time during the year for the following reasons affecting the children.

Nocturnal enuresis	2	Fear	5
Masturbation	1	Depression	1
Night terrors	3	Shyness	2
Running away	1	Delayed speech	2
Sleeplessness	2	Negativism	7
Mental defect	5	Stammering	2
For adoption	1	Delusions	1
Temper tantrums	5	Jealousy	1

Three patients were referred to the All Saints' Clinic for Psychological Medicine.

164 Home Visits were made, 45 being visited for the first time. Visiting has been very difficult to arrange because of transport, also because many mothers are doing part-time work.

The work of the Clinic has been explained to visitors. Books have been lent and advice given to parents regarding books and educational toys for the children. Frequent expressions of gratitude are received from parents for the work done in this Clinic.

The Provision of Food for Necessitous Mothers and Children

The provision of dinners to expectant and nursing mothers has continued at one centre only, namely, Monument Road.

The numbers attending have been :—

Individual mothers	52
Individual children	35
Total dinners served to mothers	2,850
,, ,, ,, children	3,688

Other Activities

Attendances at :

Sewing classes at centres	11,535
Health talks at centres	78,825

Surveys, Visitors and Refresher Courses

A nutritional survey was conducted in Centres by two Medical Officers of the Ministry of Health during the week beginning 30th October. The centres were selected to give a fair cross section of the mothers and young children in the City. The general nutritional standard was found to be good.

Visits have been paid to Welfare Centres by the following :—

Various groups of members of the A.T.S.,
Industrial nurses,
Social science students,
School children,
A group of foreign students,
A group of health visitors from another area,
and various individuals, including councillors from other local authorities.

At the request of the British Council, the department arranged a Refresher Course for Canadian nurses in August.

The Home Help Scheme

The number of cases attended by home helps during 1944 was 699 :—

Confinements	643
Special scheme	56
	699

an increase of 326 on the preceding year.

Cases for which no home help available	32
Number of full-time home helps employed	35
Number of part-time home helps employed (available own district only)	3
	38

Twenty-six new home helps have been appointed during the year. All newly-appointed home helps agree to undergo a course of training in domestic subjects and mothercraft.

The first Training Course commenced on October 16th and continued on one evening weekly for ten weeks. The lectures and practical instruction were given by Public Health Department staff, in conjunction with the City Education Department.

Twelve home helps have resigned.

Applications for the services of home helps are increasing.

Staff

Three members of the health visiting staff have resigned on reaching retiring age, namely, Misses Baker, Simon and Rowe, and three resigned on account of ill-health—Misses Greavett, Ryan and A. Lawson.

Miss Baker had acted as Superintendent Health Visitor since the resignation of Miss Baxter in 1937.

She gave keen and loyal service to the Department, and her fine character and influence are reflected in the high standard maintained in the work of the Health Visitors during her period of service. She has been succeeded by Miss Sinnett.

Canwell Hall Babies' Hospital. (67 beds)

This hospital admits sick children up to the age of five years, mainly from Welfare Centres and War-time Nurseries.

During the year there were 403 admissions, 400 discharges and 12 deaths. Of the discharges 55 were transferred to other Hospitals and 18 were removed by their parents against medical advice.

There were 56 cases of infectious disease, a very considerable reduction on the incidence during 1943. During the year the accommodation in the Hospital was surveyed, and it was decided to reduce the number of beds from 84 to 67. This was done to minimise the risk of the spread of infection and there is reason to hope from the satisfactory figures already quoted that these arrangements along with others which are in process of being put into effect are likely to be effective in the control of infection.

Of the deaths, 6 were from broncho-pneumonia, and 5 from gastro-enteritis. The admissions included bronchitis and pneumonia, 77; malnutrition, 73; gastro-enteritis, 30; ear, nose and throat conditions, 50; and anæmia, 30.

Ten children showed positive reactions to tuberculin tests.

HEALTH EDUCATION.

Following discussions which took place at the end of 1943 between the Birmingham Council for Social Health and the Public Health Committee, it was decided that as from the 1st of January, 1944, the Public Health Committee should take over the direct responsibility for the work of Health Education which had been carried on with such zeal and effectiveness over many years by the Birmingham Council for Social Health.

Health Education in Schools

Until such time as the Education Committee are able to make their own arrangements, Health Education lectures have been given to girls and boys in both Secondary and Elementary Schools. During the year, 421 lectures were given in schools.

Arising from these lectures, requests have been received for staff and children to visit Maternity and Child Welfare Centres. The personnel in the Centres have explained the functions of their work to these groups ; great interest has been displayed resulting in increased requests for further visits.

Number of lectures at Schools	421
Number of lectures to Youth Groups	83
Number of lectures to Adult Groups	42
	546
Visits by groups to Maternity and Child Welfare Centres	10

Adolescent and Adult Health Education

Lectures have been given to many types of adolescent and adult organisations, as the following list will show :—

Factories :	British Red Cross.	
	Factory Groups.	
Women's Groups :	N.C.W.	
	War Workers' Clubs.	
	Co-operative Guilds.	
Women's Services :	W.A.A.F.	
	A.T.S.	
	Canadian Nurses.	
Educational Activities :	Nursery School Head Mistresses.	
	Refresher Course for Day School Teachers.	
Pre-Service Organisations :	W.J.A.C.	
	A.T.C.	
	G.T.C.	
Youth Organisations :	Evening Institute.	Rover Scouts.
	Settlement.	Y.M.C.A.
	N.A.G.C.	Y.W.C.A.
	N.A.B.C.	Refugees' Club.
	Youth Leaders.	Rangers.
	Boys' Brigade.	Youth Club.

There is one whole-time male lecturer. The rest of the work is undertaken by medical officers and members of the health visiting staff.

In order to assist lecturers in preparation and presentation of their material, the Health Education Sub-Committee have agreed to arrange a course of lectures on the technique of teaching early in 1945.

A library is in process of being formed—a grant of £20 towards the cost being authorised by the Health Education Sub-Committee. These text books are to be used for training and assisting lecturers.

There is a steady increase in the demand for lecturers covering the widest aspects of Health Education. A close liaison is maintained with the Central Council for Health Education. The Ministry of Information have also given assistance in the showing of films.

NURSERIES

The last nursery in the proposed War-time Nursery programme was opened in January, 1944, making a total of 78 nurseries. Of these, 7 are 24-hour nurseries, i.e., children are accommodated day and night, from Monday to Saturday, and go home for the week-ends. The mothers of these latter children are on difficult transport work, e.g., on omnibuses or railway duty, and their hours of work do not coincide with the opening hours of the day nurseries. One nursery has a sick bay attached, and is open continuously. Two nurseries attached to Marsh Lane and Warren Farm Road Welfare Centres were closed in 1943 owing to diminution in attendances and to unsuitability of premises. Adaptations were carried out at both to convert them as Toddler Units, but shortage of staff made it impossible to re-open them in 1944.

At the request of the Governors of the Children's Hospital, the nursery which by their great kindness had functioned in Wards 5 and 6, was closed in December, 1943, and 30 " tweenies " and babies were accommodated in Ward 8. Adaptations were commenced at 25, Francis Road—a house kindly offered in substitution by the Governors of the Children's Hospital—for the accommodation of the toddlers. The new unit was opened in July, 1944, some of the nursing staff, previously billetted in the Children's Hospital, being given accommodation at the Ravenhurst Road Nursery, Harborne. Later, a nurses' hostel was opened at 31, Langley Road, Small Heath, for the accommodation of 13 nurses.

Transport Arrangements

We have been greatly indebted to the Civil Defence Committee for helping us to overcome transport difficulties. One example of this was when the waiting lists at City Nurseries were so large it was decided to collect at Irving Street and Hope Street Welfare Centres, children not able to be accommodated centrally, and to convey them by ambulance to a comparatively empty nursery in Allenscroft Road.

Goodway Road Nursery again had to be closed temporarily for cleaning operations, and the children were transported by ambulance to and from Warren Farm Road Nursery, which had fortunately become available.

Staffing

There have been extreme staff shortages in several areas in the City, particularly in the Alum Rock and Small Heath areas—a shortage which even the opening of the nurses' hostel in that area has not fully alleviated. From time to time we have been grateful for the assistance of members of the A.T.S. and W.A.A.F., at times when their duties were light, but their attendances have necessarily been irregular and of short duration.

The Ministry of Labour gave publicity in the press to our need for girls, 16–18 years of age in the nurseries, with, however, only moderate response.

Five Senior Child Care Reserve Courses were provided during 1944 by the Education Committee. 72 candidates passed the examination successfully. There were 2 supplementary Senior Child Care Reserve Courses held during 1944, giving extra training to Child Care Reserve members who had shown particular aptitude in the training of toddlers. When these candidates passed the necessary examination, and were approved by His Majesty's Inspector of Schools, they became Wardens (or teachers) in the nurseries. 23 candidates passed this course successfully.

The three Canadian Nursery School teachers who had been acting as Superintendents of Wardens in the War-time Nurseries, completed their two years' service in June. They rendered most valuable services to the nurseries during their stay in Birmingham. They were replaced in September by the appointment by the Education Department of 12 Nursery School teachers to act as Superintendents of the Wardens in the Nurseries.

Through the Canadian Children's Service, we have received numerous gifts of second-hand clothing for distribution in the Nurseries, and a money grant at Christmas spent on books for each Nursery ; sweets, chocolate and dried milk have also been received.

We have also been greatly indebted to working parties at the Lady Mayoress's Depot for the making of Nursery garments. 14,000 garments have actually been made during the last 2–3 years.

We have similarly been indebted to the wounded soldiers convalescing at Hollymoor Hospital for the repairing of broken toys in the nurseries, and for making certain educational equipment, such as blackboards, wheelbarrows, etc.

221 Nurses, 14–15½ years, attended Bournville Continuation School throughout 1944, attending one day a week.

152 Nurses were submitted for the examination for the National Society of Children's Nurseries Diploma—117 passed the written and

practical examinations, obtaining the diplomas, 5 gaining distinctions. There were only 12 complete failures, others passing either written or practical.

Nurses already holding the N.S.C.N. Diploma attended special courses held at the Children's Hospital, Birmingham, and at Canwell Babies' Hospital, where special instruction was given in the care of the sick child. This special experience enables these nurses to take the post of deputy matron in the War-time Nurseries.

A refresher course of 12 lectures was arranged for Nursery Nurses who were willing to attend in their off-duty time. 33 Nurses availed themselves of this opportunity.

The first floor of the Y.W.C.A. Nursery, Selly Oak, which was equipped for a Sick Bay for the Nursery children has also been used for accommodation for children needing temporary reception during illness or otherwise enforced absence of the mother. 109 such children and 84 sick nursery children were admitted to the Sick Bay in 1944. The Mennonite Committee (Canada and U.S.A.), have very kindly sent gifts of clothing to this Nursery for use in the Sick Bay.

At all Nurseries except four, the children have been immunised against whooping cough ; the remaining four nurseries starting immunisation in 1945. The results are difficult to assess, as the nursery population is a floating one, and only about half the children immunised are still in the nurseries, hence a final conclusion is not yet available. Diphtheria immunisation continues to be offered to all nursery children.

Following a request from the Education Committee, arrangements were made to take children attending nursery classes at Benson Road and Cockshut Hill Schools into Bacchus Road Nursery and Garretts Green Lane Nursery. Sixteen children with a teacher, a member of the Child Care Reserve, and a student were transferred to Garretts Green Lane Nursery ; while from Benson Road School four children were transferred to Bacchus Road Nursery.

Three central kitchens supply cooked mid-day meals for staff and children in all the war-time nurseries in the City, except seven, which cook for themselves. These meals are conveyed in specially insulated containers, transported by vans. Breakfast and tea commodities are sent out to the nursery, where these meals are prepared and served. Some idea of the large amount of work done in the kitchens can be gained from the following figures, showing a weekly average of meals sent out :—

	Yardley Green Kitchen.	*Selly Oak Kitchen.*	*Bacchus Road Kitchen.*	*Totals.*
Breakfasts	3,430	3,666	2,933	10,029
Dinners	6,302	7,679	5,701	19,682
Teas	5,394	6,778	4,732	16,904
Hot beverages :				
(*a*) Staff	6,048	7,760	5,968	19,776
(*b*) Children	9,094	10,672	8,589	28,355

Mass Radiography

The preliminary arrangements for the mass radiography of the 1,300 staff employed in the nurseries (including cleaners) were made in 1944, but owing to delay in opening the building which houses the plant it was actually not carried out till 1945.

Evacuated Nurseries, etc.

Two nursery schools were evacuated from Kent to Birmingham, one being accommodated in an emergency hostel in Serpentine Road (57 children and 18 staff), and the other in the Convent, Alum Rock (50 children and 14 staff). The latter returned to Kent in November.

Foxhill Nursery, near Rugby, closed in August. Nine of the children were accommodated in our residential nurseries. The rest returned to their own homes.

Ninety-two children who had been evacuated with their mothers, and whose mothers found work in the City, were accommodated in Day Nurseries.

A large number of evacuated expectant mothers were accommodated in hostels in the City. When they went into hospital for their confinements accommodation was found for their younger children in residential nurseries.

Wassell Grove Residential Nursery, nr. Stourbridge. (Number of beds, 58)

This institution receives children under 5 years whose mothers are on war work, the hours of which do not coincide with the hours of the day nurseries.

There were 89 admissions during 1944 and 82 discharges.

Thirty-one children have been admitted during 1944 to relieve pressure in Birmingham Infirmary. Thirteen children have been admitted who were evacuated with their mothers through the Government evacuation scheme. The admissions were arranged when the mothers were admitted to hospital for confinement.

Six nurses passed the N.S.C.N. examination during 1944, and 2 passed the written examination. There was one failure in both sections of the examination.

Oaklands Nursery, Droitwich. (Number of beds, 48)

This institution, like Wassell Grove, receives children of mothers who are working on difficult shifts. During 1944 there were 56 admissions and 54 discharges. Thirteen children were admitted to relieve pressure in Birmingham Infirmary, and 9 evacuees were admitted.

Four nurses passed the N.S.C.N. examination during 1944 and 2 passed the practical examination. There were no failures in the examination as a whole.

Red House, Overbury. (Number of beds now 30). (Evacuated from Lordswood Nursery, Harborne)

This institution receives children under the age of 2 years from Birmingham Infirmary. There were 105 admissions and 76 discharges during 1944. Early in the New Year, one ward had to be closed owing to lack of staff, reducing the beds from 48 to 40. This shortage was mainly due to the new regulations of the N.S.C.N., which require six months' toddler training for the Nursery Nurses' examination, with the result that the nurses had to be transferred to Birmingham nurseries for the necessary training.

Following a severe outbreak of dysentery, it was decided that the number of beds should be reduced from 40 to 30.

Nine nurses have successfully passed the N.S.C.N. examination during 1944, and one nurse passed the practical only. There were no complete failures.

Perry Villa, Perry Barr

This property was purchased by the Corporation during the year, with a view to erecting a new maternity home of 100 beds on the site. In the meantime, it was decided to convert the existing building into a residential nursery for children transferred from Birmingham Infirmary.

Residential Schools

There were four residential schools on the register at the end of 1944. These are schools which take boarders under 9 years of age, which come within the provision of Section 219 of the Public Health Act, 1936.

Voluntary Homes

These homes take children under 9 years of age (for maintenance and care), apart from their parents. There were 5 such homes on the register at the end of 1944.

CARE OF THE UNMARRIED MOTHER

The number of cases dealt with by this department has again risen sharply to a total of 1,418, compared with 1,078 in 1943. Of these, 962 were unmarried mothers and 456 married women with illegitimate children. Among the unmarried mothers, 783 were first cases of illegitimacy. It is interesting to note that the percentage of multiple cases has not increased in 1944, being 12·6% as compared with 12·9% in 1943. The cases of illegitimate children born to married women, however, has increased from 23% of the total in 1943 to 32% in 1944.

Dealt with at:	*First Cases*	*Multiple Cases*	*Married Women*
Hope Lodge	82	1	—
Woodville	30	1	—
Francis Way	26	—	—
Cleveland House	5	—	—
Lyncroft House	12	3	1
Hostel	20	3	—
Homes out of city	15	2	—
Birmingham Infirmary	10	4	4
Returned to Ireland	4	5	1
Left city before confinement	17	1	13
Born out of city	—	4	—
Own home except for confinement	410	108	306
Own home entirely	152	47	131
	783	179	456

Of the 1,418 cases dealt with, 915 were Birmingham residents, 503 cases came to Birmingham during the year, and only 178 of these were transferred war workers.

Report on total 1,418 *cases at end of year*:

		Percentage.
44	mothers and babies still in the Homes	3·1
87	babies have died	6·2
208	babies have been adopted	14·6
30	babies are in homes (without the mother)	2·2
23	babies are with foster mothers	1·6
63	mothers have married the babies' fathers	4·4
197	mothers and babies have left the City	13·9
766	mothers at home with their babies	54·0
1418		

Home visits paid *re* unmarried mothers	2,078
Special visits paid *re* unmarried mothers	293
Cases visited in hospitals	848
Homes inspected *re* suitable lodgings with babies	50
Office interviews, applications	1,226
Office interviews, other than applications	3,984
V D. Office interviews	99
Special visits *re* V.D. cases, etc.	131
Girls under age of consent:	
15 years old	5
16 years old	10
	15

Of the 179 multiple cases, 116 were cases which had been previously dealt with by the department. In 55% of the 179 cases the father of the second child was the same as the father of the first. The following summary shows the position in regard to the previous children born to these 179 women :—

126 still had other illegitimate children in their care (20 cases having more than one child) .... 70·4%
26 first child dead 14 5%
7 first child in a home .... 3·9%
17 first child adopted .... 9·5%
3 first child adopted by grandparents .... 1·7%

	Cases dealt with in the Department.	*Total Illegitimate Births.*	*2nd.*	*3rd.*	*4th.*	*5th.*	*6th.*	*7th.*	*8th.*
1944	1,418	1,445	—	—	—	—	—	—	—
1943	1,078	1,163	25	7	5	1	—	—	—
1942	934	1,013	19	6	4	4	—	—	1
1941	750	770	13	2	—	—	—	—	1
1940	527	666	5	3	—	—	—	1	—
1939	561	674	6	1	—	—	—	—	—
1938	650	697	3	1	—	—	—	—	—
1937	532	628	4	—	—	—	—	—	—
1936	400	553	—	—	—	—	—	—	—
1935	416	530	1	—	—	—	—	—	—
1934	428	574	1	—	—	—	—	—	—
1933	451	554	1	—	—	—	—	—	—
1932	318	546	1	—	—	—	—	—	—
1931	238	576	—	—	—	—	—	—	—
1930	222	623	—	—	—	—	—	—	—
			—	—	—	—	—	—	—
			79	20	9	5	—	1	2

The following table gives details of the cases among married women :—

234 Husbands in Forces (15 prisoners of war).
2 Husbands working away from home.
164 Living apart from their husbands.
56 Widows.

456

14 have had a second illegitimate child while their husbands were away.
178 had told their husbands, and of these 33 are being divorced.
56 refused to let their husbands know.
67 of the 456 cases are living with the putative father.

There have been only 37 cases of venereal disease, all dealt with at appropriate clinics.

Lodging Money Grant

The grant of £20 per month made by the Committee to assist in paying lodgings for the illegitimate cases has been of special help this year. During the year £177 2s. 3d. was spent on lodgings, of which

£15 2s. 0d. has been refunded; 56 cases were helped. The actual cost to the Department was thus £162 0s. 3d.—an average of £13 10s. 0d. per month, and £2 17s. 10d. per case. The comparatively small refund has been because most of the cases helped have had definite financial difficulties.

INFANT LIFE PROTECTION AND FOSTER MOTHER SCHEME

It has been increasingly hard to find good foster mothers. The old-established foster mothers have given excellent service, but few new ones have come forward and the majority of these have been potential adopting parents. The children have been well and happy, and few have moved, except to the care of their parents. The majority have had continuous care by one foster mother, and have made good progress in every way.

The mothers have repaid 72% of the money paid to the foster mothers.

Applications for foster mothers	172
Foster mothers interviewed	662
Unnotified foster mothers	41
Applications for foster children	77
Visits *re* suitability	118
Homes registered	106
Special visits *re* foster children	726
Routine visits *re* foster children	177
Office interviews	2,179
Foster children registered	140

At the end of 1944, *figures were as follows:*

Foster mothers on Birmingham scheme	43	
Foster mothers "non-scheme"	216	
		259
Foster children on Birmingham scheme	44	
Foster children "non-scheme"	231	
		275

Total foster children dealt with during 1944.

Scheme	105		
Non-scheme	277		
			382
Illegitimate — Scheme	93	=	24%
Illegitimate — Non-scheme	155	=	41%
Legitimate — Scheme	12	=	3%
Legitimate — Non-scheme	122	=	32%

Foster children on scheme who attained the age of 5 *years*

All remained in the care of their foster mothers.

Foster children on scheme who removed :

Returned to parent	25
Adopted by foster parents	16
Removals to other homes for adoption	13
Became "non-scheme" foster children	2
Removed to Institution	1
Died (congenital syphilis)	1

Foster children attaining the age of 9 *years*

All remained in the care of foster parents.

Total payments to foster mothers	£1,559 0 0	
Total payments by parents	£1,126 0 0	*i.e.*, 72%.
Cost to Public Health Department	£433 0 0	
Average cost per child, per week	3 6	

Children's Home Service

The following are the statistics in respect of the service :—

Homes inspected	1,013
Homes rejected or withdrawn	387 *i.e.* 38%
Homes available	626
Children who could be accommodated	701
Notifications received of children placed	694
Total office interviews	218

The total amount paid out during 1944 was £11,669 11s. 0d. The average amount per four-weekly period was approximately £898 0s. 0d. This represents the care of 1,123 children. Contrary to experience in previous years, the greater incidence of work occurred between January 1st and July 1st, when the average four-weekly payment was £929, representing the care of 1,236 children. The average for the latter half-year was £866, representing 1,082 children.

The percentage of applications rejected or withdrawn has increased by 10%. The withdrawals have been largely due to general fatigue of the mothers and the difficulties of caring for the aged members of the family. The mother begins work in all good faith, but finds her home responsibilities too great, and gives up after two or three weeks.

The health of the children has again been good, and there have been few moves from one home to another. Those which have occurred have been due to illness, a new baby, etc., rather than to indifferent care and quarrels.

ADOPTIONS

A new feature in the past year has been the requirement of a satisfactory statement of health in each parent intending to adopt a child. A detailed medical certificate must now be furnished in respect of each adopting parent, where the adoption is arranged through the Public Health Department.

The following children were examined at the Carnegie Institute during 1944 :—

Number of children examined prior to adoption	239
Number of foster children examined	1
Number of 1943 " adoptions " reviewed in 1944	3
Number found to be healthy	173
Number found to be quite unsuitable for adoption	3
Number found to have defects	63

Cases quite unsuitable for adoption :

1. Had positive Wasserman. (To Birmingham Infirmary).
2. Severe general debility. (In care of relation).
3. Severe congenital heart disease.

Defects :

Enlarged thymus	31	
Post pneumonia	11	
Mild congenital heart lesion	4	(all adopted).
Positive Mantoux (negative guinea pig test as regards tuberculosis)	1	(to be adopted).
Active rickets (cured at Canwell)	1	
Anaemia (mild)	4	
General debility (mild)	2	
Infantile eczema	2	(both adopted).
Bronchitis	2	
Dental caries	1	
Delayed dentition (not rickets)	1	
Genu valgum	1	
Otorrhoea	2	

The foster child who was examined was found to have a double inguinal hernia. This has been successfully operated on at the Children's Hospital.

Cases reviewed from 1943 :

(1) ..... 1943 — Enlarged thymus.
1944 ..... Normal.

(2) ..... 1943 ..... Enlarged thymus.
1944 ..... Thymus still enlarged.

(3) ..... 1943 ..... Doubtful mental defect.
1944 ..... Still doubtful.

First enquiries re adoption	492
Applications to Public Health Department for baby	328
Applications to Adoption Societies	25
Applications in respect of private arrangements :	
Direct placing	57
Third party	29
Foster children adopted by foster parents	29
Applications refused, referred elsewhere, or cancelled	161
	1,121

Children placed in homes by Public Health Department

First babies under six months	41	
Illegitimate babies of married women	123	
Children of a second or subsequent pregnancy	25	
Older children	26	
	215	

Private Arrangements

First babies (under 6 months old) of unmarried mothers	46	
Other children placed	38	
	84	

Children adopted by foster parents	29	
Total illegitimate children born in the City	1,445	
Number placed for adoption by Public Health Department	215	(15%)
Number placed for adoption privately	84	(5%)
Total Adoption Orders granted in the City	409	
Number arranged through Public Health Department	239	(55%)
Total Office interviews	2,831	
Total visits	1,249	
Attendances at Children's Court	50	
Deaths : (1 gastro enteritis) no inquest (1 convulsions) ,,	2	

Birth Control Clinics.

	Dudley Road Hospital.	*Selly Oak Hospital.*
(1) Number of women seeking advice :		
(*a*) Married women suffering from gynaecological conditions, making pregnancy detrimental to health	28	56
(*b*) Married women suffering from other forms of sickness detrimental to them as mothers in that child-bearing is likely seriously to endanger life	27	38
(*c*) Other cases not coming within the categories authorised by the Ministry of Health	11	2
(2) Number of women advised in birth control methods	55	95
(3) Number in which birth control advice was given but pregnancy resulted	5	6

Comments of Medical Officer in charge of Birth Control Clinic at Dudley Road Hospital

The total number of attendances at the Birth Control Clinic were 425, of which 55 were new cases accepted for advice.

Severe pregnancy toxæmia and eclampsia accounted for 50% of the new cases.

Five pregnancies occurred, but none were in patients attending for less than fifteen months. In three cases all precautions had been observed; one of these aborted, the other two continuing with the pregnancy. The remaining failures were due to neglect of precautions and in neither case will termination of pregnancy be necessary.

Notes on Birth Control Clinic at Selly Oak Hospital

During the year 1944, there were 301 attendances at the Birth Control Clinic at Selly Oak Hospital.

Of these, 105 were new cases, and 9 of them were not accepted as suitable. 56 cases have been classified as obstetric, and of these 36 were sent from hospitals in Birmingham suffering from toxæmia, preclampsia or eclampsia. In a large number of these cases the women had been advised, by their obstetrician, to avoid pregnancy for at least two years.

Among the new cases one woman was found to be pregnant when she attended for her second visit.

196 old cases were treated, and of these 6 are known to have become pregnant. In one of these cases the woman had not attended for two years; two of the women had not attended for 12 months, nor had they carried out the instructions given; two of the women who had had toxæmia with the previous pregnancy discontinued birth control and became pregnant. In one case pregnancy occurred although instruction was apparently carried out.

In three cases kidney function tests and clinical examination were normal, and birth control was discontinued.

SECTION C

SANITARY CIRCUMSTANCES

Water Supply

The water supply of the City has continued to be satisfactory both from the point of view of quality and quantity. A constant supply of pure water is available from a complete network of distribution mains in all parts of the City. Communal standpipes are no longer in use.

As the soft water obtained from the Elan Valley is liable to have a plumbo solvent action, hydrated lime is added to the water at the Elan Valley Waterworks to the extent of 0·6 parts per 100,000. A monthly estimation of the plumbo solvent action of the raw water has given an average figure of 0·22 parts per 100,000 for the year. The closest co-operation has been maintained with the Water Department in all aspects of the work undertaken by this Department.

Routine Sampling of Corporation Water

Routine weekly visits are paid to the Waterworks at Frankley and Whitacre, and fortnightly visits to the deep wells at Longbridge, Aston and Shortheath, and appropriate samples are submitted to bacteriological investigation and chemical analysis. At each weekly visit to Frankley and Whitacre, bacteriological samples are taken from the raw water both before and after storage, and from the treated water after filtration and chlorination. On every occasion throughout the year the samples of treated water have given completely satisfactory results.

One sample taken from the Elan Valley Aqueduct at Ludlow is submitted at fortnightly intervals. During the year the Army ceased to use the gathering grounds at the Elan Valley Waterworks for training, and accordingly the submission of samples taken directly from the Waterworks was discontinued.

The number of samples of Corporation water, including those from Ludlow, taken for examination during 1944, was :—

Chemical	181
Bacteriological	578

Pollution of Bartley Reservoir by Seagulls

In last year's report, comment was made concerning the serious pollution of Bartley Reservoir by seagulls. The gulls again returned to the reservoir early in December, and shortly afterwards samples of the water showed definite evidence of pollution. Explosives were used as in the previous year, and at once succeeded in dispersing the gulls.

As a result presumably of the prompt use of explosives, the pollution was only in evidence for approximately one month, whereas during the preceding winters there was evidence of pollution over periods of at least three months.

As in previous years, the pollution caused by the gulls was successfully dealt with by filtration, and chlorination, and the water leaving Frankley was at all times pure and wholesome, but in order to be certain of achieving this aim, a comparatively high degree of chlorination had to be maintained for a number of weeks.

Sampling of Well Waters

There are still on the Department's list some 250 wells. Approximately 100 of these are used for drinking purposes, and the premises supplied are mainly private dwellings and farms.

During the year 10 wells were inspected, and 25 samples were submitted to both chemical and bacteriological examination. Five samples were taken from factories, mainly as a result of applications under Section 41 of the Factories Act 1937. Of wells to farms and houses, 10 out the 17 samples taken were found to be polluted. In 2 cases a Corporation supply was installed, and in the remaining cases the only practicable course available was to advise the tenants to boil the water.

Well water was sampled from three institutions which are outside the City, but are under the control of the Public Health Committee, 29 such samples being submitted to chemical and bacteriological examination.

Sanitary Inspection

More than 88,000 visits were made during the year by the depleted staff of sanitary inspectors, despite the many calls, national and local, made on their services in other capacities.

Of this total, 46,644 house inspections were made for various reasons, and investigations of infectious diseases and miscellaneous complaints caused 11,777 visits.

The summonses taken out during the year were as follows :

General nuisances	82
Extortionate rent	11
Miscellaneous	13
TOTAL	106

Magistrates' order was obtained in 26 instances.

Offensive Trades

Premises registered for the carrying on of offensive trades in the City were visited on 7 occasions, of which rag, bone and skin dealers received 4 visits.

Common Lodging Houses

At the end of the year there were fourteen registered common lodging houses in the City, affording accommodation for 810 males and

46 females. These premises have continued under regular supervision during the year.

Number of houses on register (for males only)	13
Number of houses on register (for females only)	1
Number of lodgers allowed	856
Number of visits	1,120

Houses Let in Lodgings

At the end of the year there were 368 houses let in lodgings on the register, containing 2,458 rooms. They were let as follows :

Number of lets of single rooms	918
Number of lets of two or more rooms together	598
Certified accommodation (persons)	4,908

The visits and re-visits paid during the year numbered 237.

Tents, Vans and Sheds

Few complaints were received during the year concerning tents, vans and sheds, and these have mostly been dealt with by the City Surveyor under the Birmingham Corporation (General Powers) Act, 1929.

Canal Boats

The number of boats inspected on the canals within the City area was 1,385.

These boats were registered for the accommodation of 4,064½ persons, and when inspected were found to be carrying persons represented in terms of adults to the number of 2,543½.

Of the 1,385 boats inspected during the year it was found that 1,226, or 88·5 per cent. were in good condition and conforming with the Act and Regulations, while in 159, or 11.5 per cent. of the total, various contraventions were found.

Complaint notes were duly served on the owners in all cases. There were 103 contraventions outstanding at the end of 1943, and a further 336 were found during 1944. Of these, 336 were remedied during the year, leaving 103 still outstanding at the end of December.

It has not been necessary during the year to take any Court proceedings under the above Act or the Canal Boat Amendment Regulations, 1925.

Factories Act 1937

The total number of visits paid to factories was 1,614. These visits include re-inspections after the service of notices, and the number necessary in this respect has increased, due to the difficulty in which manufacturers are placed in obtaining both labour and materials to complete the necessary work.

Three cases of overcrowding in workrooms were dealt with. In one case, the firm acquired new premises ; in the other cases additional workroom space was provided.

Several joint visits to factories have been made with H.M. Factory Inspectors, mainly in an advisory capacity concerning the permits and licences required for the alteration or re-building of sanitary accommodation.

Co-operation with the City Surveyor's Department, whereby the plans of new buildings containing factory sanitary accommodation are inspected, has resulted in several potential infringements of the Factories Act 1937 being remedied at this early stage.

The classification figures on the Register are as follows :

Factories with mechanical power	4,073
Factories with no mechanical power	865

Rats

The Infestation Order 1943, was made in May, 1943, to supplement the powers of the Rats and Mice Destruction Act, 1919, and the Ministry of Food used the Order to initiate an intensified and co-ordinated campaign against rats and mice throughout the country. The year 1944 saw the steady and progressive development of this campaign. As far as Birmingham is concerned, this meant : (1) the appointment of an additional whole-time rodent inspector ; (2) the appointment of up to 20 rodent operatives who, after brief training, are able to carry out the instructions of the inspectors as to trapping, poisoning, etc. ; (3) following the issue of a direction by the Ministry of Food in March, an intensified and sustained attack against rats in sewers, in co-operation with the Public Works Department ; (4) special measures, in co-operation with the Salvage Department, to reduce the infestation in that Department's destructors, which from their nature are inevitably major centres of rat infestation.

As regards the ordinary " overground " work, the procedure as hitherto has been to investigate complaints received, advise as to work to be undertaken, and on request to carry out the work. It is, however, made clear to the occupier that the responsibility for clearance is on him, and when the work is undertaken by the Department's operatives an appropriate charge is made. So far we have not entered into contracts for repeated treatment, though frequently requested to do so. In March, the Ministry undertook an intensive propaganda campaign, which greatly increased the number of complaints received. For some weeks the complaints were received much faster than they could be investigated, but as the effect of the campaign wore off, and as reported infestations were dealt with, the inspectors were able to catch up with the work, and by the end of the year there were no complaints outstanding.

Total complaints received	3,680
Treatments undertaken by the Department	1,168
Bait used (sausage rusk)	3,484
Poison used—Zinc phosphide	70 lbs.
Arsenic	12½ ,,
Operatives employed	8

An analysis of 200 consecutive complaints in the peak period shows that they related to :

Dwelling-houses	82%
Shops	11%
Factories	5%
Cafes, Clubs, Offices, Nurseries	0·5% each

A number of the Department's institutions have been treated, including Canwell Hall, the nurseries at Wassell Grove, Overbury, Pype Hayes and Droitwich, and the sanatoria at Romsley and Yardley. Results are stated to have been excellent.

" Block Control Schemes." (1) In June and July, 1944, a large Factory Centre was inspected and treated en bloc. A light general infestation was found throughout the area, and notices to treat were served on 27 factories. Twenty-four of these were treated by the Department's operatives, and the remaining three by a pest control firm with whom they were under contract, the firm using the standard (Ministry of Food) methods, and synchronising their treatment with that given by the Department. Simultaneously, a Corporation Salvage Destructor, which adjoins the Factory Centre, was treated by our operatives by agreement with the Salvage Department.

A follow-up investigation showed that the infestation had been very substantially reduced, but the area is subject to constant re-infestation from the River Rea and the Salvage Destructor. The estimated kill was about 400.

(2) In September, a similar block scheme was prepared in relation to a group of factories adjoining another Salvage Destructor. Seven factories were treated (four by a pest control firm), and the destructor ; in addition, intensive poisoning of the adjoining canal bank was carried out. Five hundred and one dead rats were picked up from the destructor, and 175 from the factories, representing an estimated kill of about 5,000 rats, mainly from the destructor.

Salvage Destructors. Experience with these two " blocks " suggested the advisability of making a special attack upon the rats in the Salvage Department's destructors. As a result of discussions between representatives of the two Departments, and of the Ministry of Food, a very intensive treatment was carried out jointly by the Public Health Department's and Ministry's operatives. Five destructors were treated, including the two treated earlier in the year, and very satisfactory results were obtained. The most heavily infested was that at Montague Street,

where over 2,000 bodies were picked up, and it is believed that between 15,000 and 20,000 rats were killed. In the other destructors the rat populations were smaller, particularly in those previously treated earlier in the year. In all the destructors, follow-up inspection showed that the residual populations had been reduced to a remarkably low level. The importance of such infestations as those in the Salvage Destructors is that they act as " reservoirs " from which rats migrate periodically to the surrounding districts. Owing to the cover and food supply available, it is practically impossible to clear them entirely of rats, but by keeping the population down to a low level this tendency to migrate is removed. In addition the rats probably cause substantial loss of salvageable material. Arrangements were made with the Salvage Department for " maintenance treatment " (i.e., periodic re-treatment) of the destructors, and there have now been fitted, as permanent fixtures, special bait-trays and other devices which will overcome the difficulty of the constantly changing surfaces at the tips, and so enable relatively inaccessible colonies of rats to be reached.

Sewers. In March the Ministry of Food directed the Corporation to undertake the systematic treatment of sewers, using approved methods. In collaboration with the City Surveyor, five working squads were formed, consisting each of two sewer men and two rat operatives, to carry out the treatment under the direction of the rodent inspectors. This was the maximum number of squads that could be formed, owing to the shortage of sewer-men, and it proved inadequate to cover the whole of the City area in six months—this being a limiting time because thereafter a further treatment is required. Nevertheless, the position was not unsatisfactory. A central area was covered which included the City Centre and surrounding districts, and in this area a week's treatment, followed by a week's re-treatment a month later, was given section by section.

SUMMARY OF TREATMENT OF CENTRAL AREA (up to Feb., 1945).

Sewers treated	approx.	250 miles.
Manholes baited		3,637
Estimated kills (Ministry's formula) :		
First treatment		28,400 rats.
Re-treatment (after 1 month)		22,000 ,,
		50,400 ,,

There has been a noticeable falling off of complaints of overground infestation in the areas where the sewers have been treated, as compared with those where they have not. The maintenance treatment is showing, by the very small " takes " of bait and poison, that the rat population of the treated sewers is at a very low level.

Methods of Treatment. It has always been the policy of this Department to advocate both destruction and proofing ; in other words, to follow up the attack on the existing infestation in premises by

structural works to prevent the re-entry of rats. This is still the policy, but it is frequently difficult to arrange for structural work nowadays. As regards destruction, poisoning is used almost exclusively, for rats; though trapping remains the method of choice for mice. The use of "pre-baiting"—i.e., of unpoisoned bait for a few days prior to poisoning—and of zinc phosphide as the chief poison, has proved highly successful.

Two courses of instruction were held in Birmingham during 1944 by the Ministry of Food, and nine operatives attended. The senior rodent inspector has attended the periodic meetings of the Planning and Advisory Committee which exists to achieve co-ordination in the rodent control work of the various Midland local authorities; and an assistant medical officer and the senior rodent inspector attended meetings of the Central Sewer Committee in London, which is concerned with the furtherance of the Ministry of Food's plans for systematic treatment of sewers throughout the country.

Supervision of Shops

Routine inspection was carried out on the same basis as in 1943, but owing to the retirement of two of the inspectors the number available for the work was reduced from four to two.

Defence Regulation 60 (AB), was in operation from November 7th, 1943, to March 4th, 1944, and again from November 5th, 1944, to March 3rd, 1945.

The Regional Commissioner again introduced the Shops (Winter Closing), (Birmingham) Order, under Defence Regulation 60 (AC). This Order was in force from October 17th, 1943, to February 19th, 1944, and again from November 19th, 1944, to January 20th, 1945. The Regulation required shops in a defined area in the City Centre to close at 4 p.m. (except Saturday, 7.30 p.m.).

Contraventions of the Shops Acts and Regulations have been few, for the reasons stated last year.

The work of the inspectors during the year is summarised as follows:

NUMBER OF VISITS PAID

General inspection visits	3,433
General inspection re-visits	1,193
Special Visits regarding:	
Sunday Trading Restriction Act, 1936	345
Night closing of shops (1928 Act and Young Persons Employment Act, 1938)	349
Half-day closing of shops (1912 Act)	241
Appointments (various Acts)	118
Number of streets patrolled by day (1912 Act)	623
Number of streets patrolled by night (1928 Act and Defence Regulations)	430
Sunday patrol (Sunday Trading Restriction Act, 1936)	77

SUMMARY OF OFFENCES REPORTED.

Failure to exhibit statutory forms and notices	947
Contraventions of closing hours	93
Other offences	71
TOTAL	1,111
Warning letters sent	15

Smoke Abatement

The excessive smoke emissions observed, investigated and reported upon to the Health Committee have been due to two factors : (a) inferior fuel ; (b) unskilled labour. With regard to (a), close co-operation with the Regional Coal Officer, Ministry of Fuel and Power has resulted in individual cases in an upgrading of the fuel supplied, and in the case of (b) practical advice has been given to the stokers or furnace-men on the most suitable method of firing the installation, having regard to the type of installation and fuel in use.

Fumes

Insufficient consideration as to the position of fume exhaust outlets from the various trade processes often gives rise to complaints from the tenants of adjacent houses. In most cases, after investigations have been made, the management of the works concerned readily accepts the suggestions offered and agrees to carry out the necessary alterations. In this manner complaints of fumes arising from cellulose spraying, aluminium swarf drying, and the quenching of hot coke have been remedied.

Noise

Complaints have been dealt with concerning noise from machinery used for trade purposes such as metal stamping, wood chopping, ventilation and air compressors.

To mitigate such noise nuisances, the remedial measures to adopt depend on whether the noise is transmitted through solid materials, such as floor boards, joists, concrete floors, brick walls, etc., or through the intervening air.

Most of the complaints dealt with have been due to solid borne noise from machinery in factories whose walls adjoin domestic dwellings.

Complete isolation of the machinery is not always practicable, but by installation of some form of baffling, the noise complained of, when excessive, has been reduced to reasonable limits.

Swimming Baths and Pools

Close supervision of the following baths has been continued :

Corporation indoor swimming baths	15
Education Institutions	4
Business firms	1
Private open-air baths	2
Orphanage and School	1
	23

Public Baths

Four Corporation swimming baths were re-opened during the summer months in connection with the Holidays at Home Scheme ; also one privately owned lido was taken over by the Corporation and opened during the same period.

Chlorination by addition of a chlorine solution has been continued, and 154 samples of bath water were submitted to bacteriological and chemical examination. The standard of 0·2—0·5 parts of chlorine per million was not consistently attained, but in none of the samples was there a complete absence of chlorine.

Private Baths and Swimming Baths in Institutions

In accordance with the Bye-laws issued under the Public Health Act, 1936, Section 233, the local authority continues to supervise private baths. Two such baths were in use in 1944 (one during the summer season only). Samples from five baths in institutions (four educational and one private), were taken monthly throughout the season. In all these baths (36 samples), the water, as judged by bacteriological findings, was, as a rule, satisfactory, though the adopted chlorine standard was frequently not attained. It was found difficult, particularly in the case of baths carrying a small, intermittent or variable load, to maintain a satisfactory chlorine level by the addition of chlorine solution.

Verminous Conditions

Louse Infestations

A full account of the measures taken to combat infestation by lice was given in the Report for 1943, and there has been no substantial change in the position.

The high prevalence of head and body lice noted at that time is believed to have continued. There is no certain means of assessing this prevalence, but the number of cases of body lice treated at the City Cleansing Station is greater than in 1943.

In September a modification was introduced in the treatment of crab lice. An emulsion of lauryl thiocyanate (5%) is now used, which has the advantage that shaving the hair is not required. The emulsion has proved entirely satisfactory.

TREATMENT FOR LICE

City Cleansing Station, Bacchus Road.	*Men.*	*Women.*	*Children.*	*Total.*
Number of treatments for head lice	—	43	—	43
Number of treatments for body lice	457	51	—	508
Number of treatments for crab lice	11	3	—	14
Bromford Head Clinic.				
Number of treatments for head lice	3	134	5	142

Scabies

The arrangements for ascertainment and treatment have continued on the same lines as in the past two years.

The prevalence of scabies, as judged by numbers of patients and contacts treated at the Centre, reached a peak in January, 1944, when more than 700 persons attended weekly. This high figure did not, however, necessarily represent a true peak in the incidence of the disease, but was largely a result of the measures introduced during 1943, and detailed in the Report for that year, to secure the attendance of all home contacts. Prior to this time, the attendances had risen fairly steadily throughout 1942 and 1943, though with a slight tendency to fall off during the summer months. From January till August, 1944, the incidence (as judged by attendances), fell steadily and steeply, and in the latter month the weekly attendance averaged 300 ; it had in fact fallen back to the 1942 level. It was felt that this represented a true reduction in incidence, but that there was still a very substantial " core " of infected persons who for various reasons were escaping detection and treatment. Accordingly it was decided to draw public attention to the prevalence of the disease, and to the facilities for treatment provided, and posters were displayed and an account of the disease published in the daily press. This was followed by a sharp rise in the clinic attendances during September, whereafter they fell again until, in December, they were almost at the August level, and well below the corresponding level for 1942.

Thus the year 1944 saw a pronounced waning of the scabies epidemic. It must, however, be emphasised that the figure of 300 attendances per week at the end of the year permits of no complacency.

The arrangements for obtaining treatment of all contacts, with special emphasis on those " suspect contacts " who are most likely to be infested, have been pursued closely and on the whole successfully. The powers of the Scabies Order 1941 have been invoked in a large number of cases, but in only one instance was it necessary to bring a recalcitrant family to Court. The case was adjourned at the first hearing, and as one of the patients still declined to undergo treatment, a fine of 10/- was imposed ; treatment was then accepted.

The Order is of great value in lending authority to the demand that contacts should be medically inspected or treated. In the few instances, however, where it is decided to prosecute, the procedure is exceedingly

cumbersome. It is likely to be found that some members of a household have been treated (but probably re-exposed to infestation), others are untreated but known to be infested, while yet others must be compelled to undergo medical inspection ; consequently, while it is not difficult to convict this or that member of a family of failure to comply with the requirements of one or other section of the Order, it is no easy matter, even after conviction, to obtain that simultaneous treatment of the whole household which is the essence of success in eliminating the disease.

Early in the year it became necessary to appoint paid attendants at all the Centres. This resulted from the withdrawal of the Civil Defence personnel who had hitherto carried out the work voluntarily. The highest tribute of praise is due to the many members of the staff of First Aid Posts and Mobile Units who throughout three years carried out this somewhat distasteful work so cheerfully, tactfully, and efficiently.

In November, several of the First Aid Posts were closed down completely, and the premises returned to their former uses ; this necessitated the closure of three of the Treatment Centres, and two new Centres were opened to replace them.

TREATMENT OF SCABIES

	Patients and Contacts Treated.			
Centre.	*Men.*	*Women.*	*Children.*	*Total.*
Bacchus Road	1,204	1,468	1,232	3,904
Sheep Street	—	1,393	1,093	2,486
Floodgate Street	1,533	—	88	1,621
Church Road	727	868	1,026	2,621
Little Bromwich	—	1,057	909	1,966
Witton	486	705	787	1,978
Chequers Walk	—	1,174	1,130	2,304
Birchfield Rd. (until Oct., 1944)	626	1,227	1,138	2,991
Slade Road (until Oct., 1944)	572	941	626	2,139
Westley Rd. (until Oct., 1944)	262	603	972	1,837
Stirchley (from Oct., 1944)	51	63	95	209
Bromford (from Oct., 1944	58	89	62	209
Total (1944)	5,519	9,588	9,158	24,265
Total (1943)	6,103	10,582	10,715	27,400

Disinfection

The following table gives details of the work done during 1944 :

Houses disinfected after small-pox	—
Houses disinfected after scarlet fever	5
Houses disinfected after diphtheria	1,154
Houses disinfected after enteric fever	6
Houses disinfected after tuberculosis	1,556
Houses disinfected after cancer (on request)	107
Houses disinfected after miscellaneous diseases (on request)	1,806
Beds disinfected	889
Miscellaneous articles of clothing and bedding disinfected	14,374
Library books disinfected	1,377
Public conveyances disinfected	1

SECTION D
HOUSING

Housing Act, 1936

It has been impossible to take effective action under the Housing Act, 1936, during the year under review in regard to areas, or even to individual unfit houses except in a few special cases where either the conditions were so serious as to cause positive harm to the health of the occupants, or the premises were so dilapidated and dangerous to the persons occupying the building as to warrant demolition. Seven houses were represented during the year under Section 11 and one under Section 12 of the Act. The families occupying most of these dwellings were re-housed by the Corporation and the appropriate Order made in each case.

A number of houses in the City situated within the boundaries of confirmed Compulsory Purchase Orders are in a grave state of disrepair but are still occupied under the unavoidable circumstances brought about by the war.

The standing Joint Housing Conference of the several Committees interested in housing has been resumed, and has directed that, as part of the effort to meet the present acute housing needs, details should be obtained of all void houses situated in potential re-development areas which could be suitably repaired and brought back temporarily into occupation, the particulars to be submitted to the Public Works Committee for their consideration. This has been carried out and the policy in regard to these dwellings is in course of being implemented.

At the time of preparation of this report, the policy in regard to the provision of temporary houses, the erection of permanent dwellings and the more sweeping possibilities of large-scale action towards more ordered housing, under the Town and Country Planning Act 1944, was still under active review.

During the year notices were served under the Housing (Emergency Powers) Act, 1939, of intention to re-build five houses which had been destroyed by enemy action.

Overcrowding

The lamentable situation with respect to overcrowding noted in the previous war years has been in no way ameliorated during 1944. Indeed, the position has been reached where it must be regarded as a serious threat to the health and well being of the City. The work of maternal and child welfare is seriously hampered by the deteriorated conditions in so many homes, and the circumstances are becoming increasingly favourable to the spread of infectious and contagious disease. The factors leading to this situation have been discussed in previous reports, and the return of men and women discharged from the Forces has led to an even greater increase in the applications—based on overcrowding or on health considerations—for assistance in re-housing.

During the year 429 such applications were received in the Department. This figure compares with 280 in 1943, 116 in 1942 and 21 in 1941. Every application was investigated—a sanitary inspector visiting the applicant's home—and recommendations as to re-housing were made, when appropriate, to the Estates Department.

Sanitary Supervision of Public Shelters

Very few persons used the public shelters for sleeping purposes during 1944. The minimum necessary supervision was maintained.

The medical aid posts were not brought into use during the year.

SECTION E

INSPECTION AND SUPERVISION OF FOOD

Food Premises

The inspection of retail food premises under Section 13 of the Food and Drugs Act, 1938, has continued. Various defects have been found in the premises visited; these have in all cases been remedied without recourse to prosecution.

Sixteen "eating houses" were added to the register required by Section 54 of the Birmingham Corporation Act, 1935, and thirteen "transfer registrations" were made during the year.

Ice Cream

The sale of ice cream was prohibited during 1944 until December, and no action was taken by the Department in connection with this commodity throughout the year.

Milk and Dairies Administration

Close contact has been maintained with the dairy trade, and much practical advice has been given to dairymen on the handling and care of milk and milk products, and wherever possible, on planning the reconstruction and improvement of premises.

The Rationalisation of Milk Distribution Order has continued in force, and a number of the complaints received in the Department have been made by persons compelled to accept a dairyman not of their own choosing, and therefore likely to be particularly critical. Generally speaking, however, the number of complaints brought to the notice of the Department have been rather less than the average. Two of the more frequently occurring complaints are, perhaps, worthy of special mention as illustrative of war-time difficulties, namely bottles containing obvious foreign material, and bottles containing obviously watered milk. The explanation of the former is usually found to be that a bottle has been returned to the dairy containing foreign matter and has been placed first in the bottle washing machine and then sent on to the bottle filling machine without the foreign matter being discovered. This is a personal failure due to inadequate observation on the part of the staff employed for the very purpose of detecting such dirty bottles, and is obviously closely linked with war-time staffing difficulties. Obviously watered milk has been found only in bottles of sterilised milk, and has invariably proved to be

due to faulty crown corks, which have not provided a complete seal during the time the bottle is immersed in water.

No new legislation has been introduced during the year, but particulars of Defence Regulation 55 G outlining a scheme for the restriction of the sale of raw milk in certain areas, and the Heat Treated Milk Prescribed Tests Order, 1944, made under the former Regulation, were received in the early part of the year, but as they did not become operative until 1945, they will be the subject for report next year.

The following table shows the alterations in the Milk and Dairies Register during 1944 :—

	1942.	1943.	1944.
Number of wholesale purveyors	65	65	62
Number of retail purveyors	192	184	167
Number of milkshops	1,888	1,870	1,776
Number of bottled milk purveyors	4,265	4,263	4,309

Cows' Milk and Bovine Tuberculosis

This matter has been the subject of recent discussion, and the following statement has been prepared to show to what extent milk at present being sold retail in the City can be regarded as free from infection with bovine tuberculosis.

The initial approach to such a problem is obviously that of the health of the cow. Ideally, all milch cows should be free from all evidence of tuberculosis, but the present position throughout the country is that approximately 40% of all cows react to the tuberculin test, just as a very much larger percentage of adult men and women react to the test, showing that in each category a corresponding proportion have at some time experienced some degree of invasion by the tubercle bacillus. About 0·5% of all milch cows are actually excreting tubercle bacilli in their milk, but the admixture of their milk with that of other cows in the process of bulk collection implies a much wider contamination of the milk supply, though the large scale pasteurisation referred to later substantially eliminates the risk from this source.

There is, therefore, need for the utmost vigilance with regard to the health of all milch cows. The 755 such animals at present housed at the 47 dairy farms within the City area are under systematic visitation and inspection, with particular reference to tuberculosis. Bulk samples of milk from every such herd in the City are taken regularly, and individual samples are taken from any suspected cows. Any animal found to be infected with active tuberculosis as a result of clinical or bacteriological examination is at once removed from the herd, and dealt with under

the Tuberculosis Order. The following table shows the results of these investigations throughout the last six years :

Year.	*Number of Cows.*	*Number of Samples.*	*Number of Samples Infected.*	*Number of Cows found to be Infected.*
1938	953	158	14	16
*				
1940	774	55	12	10
1941	724	85	10	7
1942	743	88	12	12
1943	738	52	3	7
1944	755	50	0	6

* 1939 figures not available.

The bulk of all milk consumed in Birmingham is, in fact, produced outside the City boundary, and therefore from cows not subject to inspection by the staff of this Authority. This milk is sampled extensively on arrival in the City for evidence of tuberculosis, and the following are the results which have been obtained over the last seven years :

Year.	*Number of Samples taken.*	*Number of Samples Infected.*	*Percentage Infected.*
1938	2,386	208	8·7
1939	1,867	173	9·3
1940	2,237	244	10·9
1941	2,377	189	8·0
1942	2,408	182	7·5
1943	2,456	146	5·9
1944	2,434	138	5·7
		Average for past 7 years	8·0

The figures show a steady fall since 1940 in the percentage of samples found infected, and the rate of 5·7% obtained last year is the lowest so far recorded in this City.

Practically all this milk is effectively heat-treated before consumption, so that any tubercle bacilli which might be present in the milk on its arrival in the City are killed before such milk is consumed by the public. It may be of interest to give here the latest estimate of the Area Milk Officer of the Ministry of Food of the amount of milk in the different categories at present being sold in the City :

	Gallons of Milk per week sold at present.	*Percentage of Total.*
Pasteurised	304,089	50·5%
T.T. Pasteurised	12,559	2·0%
Tuberculin Tested	1,948	0·3%
Heat Treated	21,590	3·6%
Sterilised	242,048	40·2%
Accredited	4,958	0·8%
Non-designated	15,620	2·6%

All milk coming within the first five categories given in the table, i.e., pasteurised, T.T. pasteurised, tuberculin tested, heat treated, and sterilised, can be regarded as " safe " milk, and there should be no question of any of this milk, which comprises some 97% of all milk sold in the City, being infected with tubercle bacilli. The remaining 3% is potentially dangerous, but not necessarily so, and when the Heat Treatment Scheme outlined in a recent White Paper comes into effect, the sale of non-designated milk will cease, so leaving only accredited milk outside the range of " safe " milks, and even this small volume of milk which is less than 1% of the whole, is safeguarded to some extent by routine clinical examination of all cows comprising such accredited herds.

It can therefore fairly be concluded that the bulk of milk at present being consumed in the City is free from infection with tubercle bacilli, if the various plants for heat treatment are used so as effectively to ensure the destruction of any initial tubercle infection. This latter point is one to which special attention is consistently paid by the milk and dairies inspectors, and samples are taken regularly and submitted for examination by means of the phosphatase test, which is a very sensitive index of whether milk has been processed according to the regulations.

It is not possible to state how many, if in fact any, cases of bovine tuberculosis have recently occurred in this City through the drinking of infected milk. Bovine tuberculosis conveyed by milk causes non-pulmonary tuberculosis in the human being, but as the majority of the sufferers from non-pulmonary tuberculosis derive their infection from the human rather than the bovine type of bacillus, and as the type of bacillus affecting a particular patient is seldom ascertained, it is not possible to give figures showing the part played by each type of infection. As some guide in this matter, however, the following figures are set out to show the incidence of pulmonary and non-pulmonary tuberculosis in this City since 1921.

	Pulmonary Tuberculosis		*Non-Pulmonary Tuberculosis*	
	New Cases.	*Rate per* 1,000 *population.*	*New Cases.*	*Rate per* 1,000 *population.*
1921—1930	1,533	1·61	290	0·31
1931—1935	1,225	1·20	234	0·23
1936	962	0·93	174	0·17
1937	965	0·93	154	0·15
1938	1,011	0·96	198	0·19
1939	863	0·82	173	0·16
1940	899	0·88	150	0·15
1941	922	0·97	151	0·16
1942	1,069	1·11	188	0·19
1943	1,106	1·14	133	0·14
1944	1,190	1·20	181	0·18

It will be noted that whereas the pulmonary figures have risen throughout the war years, the number of non-pulmonary cases have on the whole continued their pre-war downward trend, a fact which is fairly definite evidence that the incidence of non-pulmonary tuberculosis derived from milk is dwindling.

Milk (Special Designations) Regulations, 1936-1941

Principal Licences.

Producers of tuberculin tested milk	2
Dealers in tuberculin tested milk	13
Producers of accredited milk	18
Dealers in accredited milk	5
Producers of pasteurised milk (Holder process)	12
Producers of pasteurised milk (H.T.S.T. process)	4
Dealers in pasteurised milk	48

Supplementary Licences

Dealers in tuberculin tested milk	5
Dealers in accredited milk	6
Dealers in pasteurised milk	4
TOTAL	117

Routine bacteriological examinations of these designated milks and their containers were carried out, 486 samples being taken for this purpose. Relative to the standard laid down in the Regulations, 13·7% failed by reason of the presence of B.coli in 1/100th of a millilitre ; 5·3% failed the bacterial count test ; 2·7% failed the methylene blue test, and in the case of pasteurised milk, 4·3% failed to pass the phosphatase test.

In commenting on these results, it is most satisfactory to be able to record that not only has a very substantial improvement taken place for the third consecutive year, but the present figures are even better than those obtained in the immediate pre-war years. Having regard to the many war-time difficulties which dairymen have had to overcome, these are very satisfactory results and reflect credit on all concerned. It is gratifying to be able to report that only 9 out of 209 samples of pasteurised milk failed to pass the phosphatase test—a result which indicates the ever increasing care and efficiency with which this important process of pasteurisation is being carried out. This result, the best so far obtained, amply justifies the close supervision maintained by the Milk and Dairies Inspectors over the process of pasteurisation.

Whenever an adverse result is obtained in a sample of pasteurised milk, the plant is re-visited, and if the cause is not readily apparent, a series of samples of milk (i.e., a " run through,") are taken at different stages of treatment, and a study of these usually indicates the source of contamination. A number of such " run throughs " were taken during the year, particularly from two plants which continued to give trouble for a period.

There are now four plants in the City operated on the newly introduced High Temperature Short Time system, and all are giving efficient service.

The Inspection of Cows and Cowsheds within the City Area

Extracts from Report by MR. BRENNAN DE VINE, F.R.C.V.S., *Chief Veterinary Officer.*

City Dairies

At the end of 1944 there were forty-seven dairy farms housing 755 milch cows in 111 registered sheds in the City area.

The Milk and Dairies Order requires the registration of cowkeepers and enforcement of general requirements as to structure and cleanliness of cowsheds, and for this purpose a monthly inspection is made of all City cowsheds ; and, in addition, all cows in City dairies are examined.

Dairy Herds

Despite shortage of labour, and other war conditions, the health and cleanliness of the cows in City dairies remains good. The cows are regularly examined, with a view to preventing danger to health from the sale of infected, contaminated or dirty milk, and in particular, for prohibiting the supply or sale of milk suspected of being infected with tuberculosis.

Mastitis

During the year there were four cows affected with acute catarrhal mastitis, and the milk produced from these cows was prohibited from sale.

Tuberculosis

In addition to the clinical examination of the dairy cows, bulk samples of milk were taken from each City dairy herd during the year.

	Taken.	*Infected.*
Mixed samples from dairy herds	50	Nil

As a result of clinical examination, six cows affected with tuberculosis were removed from the City dairy herds during the year and dealt with under the Tuberculosis Order.

In addition, at the request of the Ministry of Agriculture and Fisheries, post-mortem examinations were made on twenty-four cows dealt with under the Tuberculosis Order and which had been sent to the City Meat Market from farms outside the City.

Inspection of Cowsheds

Regular inspection has been maintained of all registered cowsheds, attention being paid to the provisions of the Milk and Dairies Order for securing adequate lighting, ventilation and a clean water supply, also the cleansing of cowsheds and removal of dung and offensive matter.

In spite of labour shortage all cowsheds have been limewashed or sprayed with lime at least twice during the year.

Milk and Dairies (Consolidation) Act, 1915

In connection with the ascertainment of the source of supply of milk, the consumption of which is likely to cause tuberculosis, notification under Section 4 of this Act was sent in 138 cases to the Medical Officer of Health for the county or county borough in which the cows yielding the milk were kept.

Comparative Return

The following table shows the number of samples of milk, sent in from outside sources, taken during the past ten years and the percentage infected with tuberculosis :

Year.	*Samples Taken.*	*Samples Infected.*	*Percentage Infected.*
1935	1,668	134	8·0
1936	1,648	166	10·1
1937	2,267	232	10·2
1938	2,386	208	8·7
1939	1,867	173	9·3
1940	2,237	244	10·9
1941	2,377	189	8·0
1942	2,408	182	7·5
1943	2,456	146	5·9
1944	2,434	138	5·7
AVERAGE FOR PERIOD			8·4

SUMMARY OF MILK TESTS FOR TUBERCULOSIS DURING 1944

	No. taken.	*No. Infected.*
From Outside Dairies :		
Tuberculin Tested, Accredited, and Non-designated	2,434	138
From City Dairies :		
Mixed samples	50	Nil
TOTAL	2,484	138

Tuberculin Testing of City Dairy Herds and of Herds belonging to Corporation Institutions

Three breeding herds, comprising 256 animals, were tested by the Department during 1944 as follows :

	Approx. No. in Herd.
1	67
2	159
3	65
TOTAL	291

Inspection of Meat and Other Foods

Under the Livestock (Restriction on Slaughtering) Order, 1940, the slaughtering of cattle, sheep and a certain number of pigs, carried out in Birmingham is concentrated at the Public Abattoir. In addition to that centre there are twelve private slaughterhouses attached to bacon factories in the City for the slaughter of pigs. Prior to the Ministry of Food's control of slaughtering there were 83 private slaughterhouses in use.

For the purposes of the inspection of meat in the Public Abattoir and in the bacon factories, there are employed five Veterinary Meat Inspectors and two Food Inspectors. The food inspection in the shops and food stores in the City is carried out by nine District Inspectors. There is also one Inspector employed in the Wholesale Fruit, Vegetable and Fish Markets.

Under the present procedure, whereby the Ministry of Food take control of slaughtering, the local authority continue meat inspection and inspection of slaughtering, as carried out prior to the change.

Shellfish

During the year, 35 samples (34 mussels, 1 oysters) were taken and sent for bacteriological examination. Of these, 5 samples were unsatisfactory. In these cases the necessary action was taken to prevent the consumption in Birmingham of contaminated mussels from the same sources.

Registered Premises used for the Manufacture of Cooked and Potted Meats

There are 214 food preparation premises on the register as follows:

Cooked meats, sausage and pork pie manufacturers	212
Jam manufacturers	2
TOTAL	214

Retail Shops

The following retail food shops were visited by Inspectors of the Department:

Beef and pork butchers	1,041
Grocers	1,511
Greengrocers	1,261
Hucksters	4,161
Fish friers	427
Fishmongers	630
Horseflesh	1
TOTAL	9,032

SECTION F

PREVALENCE OF, AND CONTROL OVER INFECTIOUS AND OTHER DISEASES

GENERAL

The mortality figures for 1944 are set out below and compared with the decennial (1934-1943) averages in the statement following :

Disease.	*Number of deaths.*	*Deaths in 1944 above or below the average for 1934-43.*
Enteric Fever	—	— 3
Smallpox	—	—
Measles	5	— 25
Scarlet Fever	1	— 5
Whooping cough	34	— 39
Diphtheria	19	— 47
Pulmonary tuberculosis	696	— 51
Other forms of tuberculosis	86	+ 8
Influenza	106	— 96
Cerebro-spinal fever	15	— 17

The prevalence of the notifiable diseases is shown in the next table :

Disease.	*Number of Cases.*	*Cases notified in 1944 above or below the average for 1934-43*
Enteric fever	5	— 32
Smallpox	—	—
Scarlet fever	2034	—407
Diphtheria	701	—404
Erysipelas	371	—145
Puerperal pyrexia	354	+ 26
Ophthalmia neonatorum	964	+ 11
Pulmonary tuberculosis	1188	+193
Other forms of tuberculosis	180	+ 12
Acute primary or influenzal pneumonia	1622	—388
Cerebro-spinal fever	51	— 65
Acute poliomyelitis	4	— 8
Polioencephalitis	—	— 1
Encephalitis lethargica	2	— 11
Malaria	4	—
Dysentery	120	+ 54

The cases of cerebro-spinal fever were again much less than those notified in the previous year (51 against 89), and the deaths fell from 17 to 14.

Diphtheria was less prevalent than during 1943, and the type less severe, the case mortality falling from 3·7 to 2·7 per cent.

There was increased incidence of pulmonary tuberculosis as compared with 1943.

The apparent prevalence of " ophthalmia neonatorum " is illusory ; only a trivial proportion are due to gonococcal infection. The great majority represent merely a precautionary notification of even the slightest condition capable of coming within the elastic definition of ophthalmia of the newly-born.

Enteric Fever

There were 12 cases notified as enteric fever, and of these 7 proved negative.

Undulant Fever

No cases of undulant fever came to the notice of the Department during the year.

Glandular Fever

No cases of this disease came to the notice of the Department during the year 1944.

Smallpox

There were no cases of smallpox in the City during the year.

Vaccination

Following are tabulated statistics relating to this work for the current year, together with similar figures relating to each year since 1935.

	1944	1943	1942.	1941.	1940.	1939.	1938.	1937.	1936.	1935.
Conscientious objectors per cent. of total births	20·3	18·9	21·2	22·6	27·5	31·2	31·8	31·2	31·0	30·6
Successful vaccinations	66·2	65·2	59·9	51·2	49·9	52·9	52·6	51·9	51·7	50·8
Insusceptible percentage of survivors.....	0·6	0·9	0·6	0·8	0·4	0·5	0·6	0·3	0·5	0·4
Postponed by medical certificate	0·3	0·3	0·4	0·4	0·6	0·4	0·3	0·3	0·5	0·3
Removed	3·8	4·0	4·4	5·3	4·3	3·9	3·9	3·8	3·4	4·9
Lost sight of	1·9	2·9	3·8	7·4	5·0	3·5	3·2	3·5	3·0	2·6
Still under notice	6·0	6·8	8·5	10·9	10·9	6·1	5·9	7·3	8·1	8·7

Measles

During the year 482 cases were admitted to Little Bromwich Hospital for treatment.

Immunisation has been carried out on 92 children during the year with satisfactory results. The inoculations were for prevention in 28 cases, and for attenuation in 64.

Scarlet Fever

The number of cases notified were about 300 less than in 1943 ; and there was only one death from this disease.

As in previous years, cases were treated in hospital where home conditions made this advisable ; otherwise they were treated at home.

The report on cases treated at the Infectious Diseases Hospital will be found on page 75.

Whooping Cough

Whooping Cough also was less prevalent than during the previous year.

During the year 496 cases were admitted to the Infectious Diseases Hospital, and the total number of deaths was 34.

Where appropriate the services of a district nurse are supplied under an arrangement made with the District Nursing Association.

Diphtheria

The total number of cases notified was much lower than in 1943, and the cases confirmed in diagnosis also showed a considerable reduction.

DIPHTHERIA CASE MORTALITY	*Case Mortality per cent.*
1901–10 (average)	14·1
1911–20 ,,	13·6
1921–30 ,,	5·8
1931–40 ,,	6·5
1936	5·5
1937	5·9
1938	6·5
1939	7·3
1940	6·0
1941	6·0
1942	4·2
1943	3·7
1944	2·7

A report on the cases treated at the Infectious Diseases Hospital will be found on page 75.

Diphtheria Anti-toxin

Diphtheria anti-toxin is distributed free of charge to medical practitioners for the treatment of their patients, and can be obtained from the Public Health Department, the Bacteriological Laboratory, and eighteen police stations.

Immunisation against Diphtheria

The total number of children inoculated through the Public Health Department in 1944 was 20,904.

Children under 5 years of age immunised by the Public Health Department Staff.....	13,652	Total under 5 years— 15,814	20,904
Children under 5 years of age immunised by General Practitioners with material supplied free by the Public Health Department	2,162		
Children from 5 to 15 years of age immunised by the Public Health Department Staff	4,911	Total 5-15 years : 5,090	
Children from 5 to 15 years of age immunised by General Practitioners with material supplied free by the Public Health Department	179		

In addition 222 adults and adolescents were inoculated with T.A.F.—mainly nursery staff.

T.A.M. was used for the children up to May, 1944, when it became impossible to obtain further supplies, and a change was made to A.P.T. in two doses—0·2 c.c. and 0·5 c.c.—at four weeks interval, routine visits being paid to Infant Welfare Centres, Nurseries, Nursery Schools, Elementary Schools and Institutions.

There is a decrease of approximately 5,000 in the actual numbers of children inoculated during the year—mainly in the school age group. This is not surprising, as it is estimated that 80%–88% of the children from 5–15 years had been inoculated by the end of 1944. Included in the remaining 12% to 20% are children who have had diphtheria and children immunised elsewhere.

There is a slight decrease in the number of pre-school children (0–5 years) inoculated, but a rise in the percentage of inoculated children from 8 months to 5 years of age as shown by the Health Visitors' cards—i.e., 67·6% of children visited between 8 months and 5 years of age or 55·3% of the children visited 0–5 years of age as against 66% and 59% respectively at the end of 1943. The high number of births in 1943 and 1944 accounts for the decrease in figures for the 0–5 year population, as children under 8 months are not available for immunisation.

There were 175 cases of diphtheria notified among inoculated children, mainly on swab results. The majority of the cases were very mild and were in hospital only a short time.

There were three deaths registered as due to diphtheria in children who had been inoculated with T.A.M.

(1) Girl, 14 years 10 months—three 1 c.c. doses T.A.M., 1930. Admitted to hospital on the fifth day—no faucial diphtheria. Post Mortem examination showed diphtheritic broncho pneumonia.

(2) Boy, 1 year 10 months. Three 1 c.c. doses T.A.M.—given by private doctor at 10–11 months of age. Admitted to hospital on the fifth day—no faucial diphtheria. Tracheotomy. Post Mortem examination showed tracheal membrane and broncho pneumonia. There was also streptococcal infection.

(3) Girl, 9 years. Three 1 c.c. doses T.A.M. at 9 months of age. Admitted to hospital on the second day—hæmorrhagic tonsillar and nasal diphtheria. The family history is here of interest :— The mother had had very severe diphtheria in childhood, the only other child (not inoculated) had nearly died from diphtheria a few years previously, and a cousin on the mother's side (not inoculated), died " within 24 hours " from diphtheria a few years ago.

Dysentery

One hundred and ninety-two cases were notified during the year, but on investigation 72 of these proved not to be dysentery, making a net total of 120 clinical cases.

Malaria

Fifty-two cases of malaria were reported during the year, all contracted abroad, and including 48 Service cases.

Food Poisoning

During the year under review 166 cases of food poisoning were notified to the Department. The majority were of a trivial nature not calling for any specific action by the Public Health Department.

Acute Anterior Poliomyelitis

Four cases of this disease were notified, and all proved to be true cases.

There was one death from this disease during the year.

Polioencephalitis

No cases of this disease were notified during the year.

Encephalitis Lethargica

During the year two fresh cases of this disease were notified and proved to be true cases .There were 8 deaths from this disease, in 7 of which the onset of disease was prior to 1944.

Cerebro-Spinal Fever

There were 110 cases notified as cerebro-spinal meningitis during the year. In 59 cases the diagnosis was afterwards revised, leaving 51 clinical cases of this disease. Of the 51 actual cases, 14 succumbed to the attack, giving a case mortality rate of 27·5 per cent.

Age Distribution.	*Cases.*
Under 1 year	6
1 and 2 years	7
3 ,, 4 ,,	1
5 and under 10 years	7
10 ,, 15 ,,	8
15 ,, 20 ,,	4
20 ,, 25 ,,	—
25 ,, 35 ,,	4
35 ,, 45 ,,	6
45 years upwards	8

REPORT ON THE CITY INFECTIOUS DISEASES HOSPITALS FOR THE YEAR 1944

By Dr. J. McGarrity, *Medical Superintendent.*

STATISTICS

Little Bromwich

The total admissions of all cases for year 1944 were 4,749

(*a*) DIPHTHERIA. (*Uncorrected for diagnosis*)

In hospital on December 31st, 1943	176
Admitted during 1944	1,207
Discharged during 1944	1,217
Died during 1944	20
Remaining on December 31st, 1944	146

(*b*) SCARLET FEVER. (*Uncorrected for diagnosis*)

In hospital on December 31st, 1943	82
Admitted during 1944	564
Discharged during 1944	588
Died during 1944	2
Remaining on December 31st, 1944	56

(*c*). MISCELLANEOUS. (*Uncorrected for diagnosis*)

In hospital on December 31st, 1943	176
Admitted during 1944	2,978
Discharged during 1944	2,670
Died during 1944	81
Remaining on December 31st, 1944	403

(*d*) MISCELLANEOUS. (*in detail*)

Bronchitis	6
Chicken-pox	324
Diarrhoea	3
Dysentery	234
Encephalitis lethargica	1
Enteric fever	11
Erysipelas	112
Measles	482
Meningitis	89
Miscellaneous for observation	802
Mumps	112
Otitis Media	44
Pemphigus	31
Pneumonia	20
Poliomyelitis	2
Puerperal fever	55
Rubella	139
Vincent's angina	13
Whooping cough	498
Total	2,978

Scarlet Fever

During the year 564 patients were admitted with a notified diagnosis of scarlet fever. Of these 96 required revision of diagnosis of whom 26 had indefinite rashes of unknown origin, 24 suffered from rubella and 16 merely had tonsillitis.

Actually 522 cases of true scarlet fever were treated in the wards, including 7 notified as measles ; 5 miscellaneous observations ; 1 cerebro-spinal meningitis ; 6 rubella ; 2 whooping cough ; 31 diphtheria and 2 otitis media.

Concurrent infections occurred in nine cases.

There were two deaths from scarlet fever. Both patients died from toxic scarlet fever.

The principal complications were : 45 otitis media ; 90 adenitis ; 6 nephritis ; 8 myocarditis ; 9 arthritis ; 3 mastoiditis ; 11 abscess formation.

The hospital mortality was 0·38 per cent.

Diphtheria

There were 1,207 patients admitted to the hospital with a notified diagnosis of diphtheria, and of these 542 required revision of diagnosis. There were eleven patients found to be suffering from diphtheria concurrently with another infection.

Actually 678 true cases of diphtheria were treated during the year, including 13 cases notified as miscellaneous conditions.

Concurrent infections occurred in 11 cases.

A revised diagnosis was necessary in 542 of the notified diphtheria cases, of whom 370 suffered from follicular tonsillitis; 37 Vincent's infection, while 30 children had mild laryngitis only. Of these 542 cases, 2 died, one from carcinoma of bronchus and one from tonsillitis and laryngitis and broncho-pneumonia.

During the year 18 patients died from diphtheria, representing a hospital mortality of 2·65% compared with 3·38% in 1943, and 3·76% in 1942.

Analysis of the cause of death in the 18 cases showed that 12 died from circulatory collapse ; 1 respiratory paralysis ; 3 laryngeal diphtheria ; 1 laryngeal diphtheria and broncho-pneumonia ; and 1 faucial and nasal diphtheria and peritonitis.

Post diphtheritic paralysis occurred as follows : 116 palatal ; 12 lower limbs ; 1 facial ; 8 pharyngeal ; 11 neck ; 4 diaphragm ; 4 oculomotor ; 1 upper limbs and 2 ciliary.

Laryngeal Diphtheria

There were 18 patients with laryngeal involvement and of these 8 required operative interference for the relief of obstruction. Tracheotomy was performed in 7 cases, of which 3 died. Intubation was performed with success in one case.

Measles

There were 482 cases admitted with a notified diagnosis of measles, and of these 132 required revision of diagnosis, including 62 patients who really suffered from rubella, while 25 patients had indefinite rashes.

Actually 383 cases of measles were treated in the hospital, including 33 notified as suffering from other conditions.

Concurrent infections occurred in 29 patients.

The principal complications occurred as follows: 78 broncho-pneumonia; 6 enteritis; 20 otitis media; 2 mastoiditis; 1 encephalitis; 5 laryngitis; 1 pyelitis; 1 acute appendicitis; and 2 pneumococcal meningitis.

Amongst the patients with complications 4 deaths occurred; 3 from broncho-pneumonia and 1 from pneumococcal meningitis.

Hospital mortality 1·04%.

Mumps

There were 112 cases admitted with a notified diagnosis of mumps, and of these 21 required revision of diagnosis of whom 10 suffered from adenitis.

Actually 94 cases of mumps were treated including 2 sent in for observation, and 1 notified as diphtheria. All cases recovered.

Vincent's Angina

There were 13 cases admitted under this diagnosis of whom seven required revising. There were no deaths or complications.

Bronchitis

There were 6 patients admitted with a notified diagnosis of bronchitis. In five of these the diagnosis was confirmed and in 1 revision to whooping cough was found necessary. This patient died.

Diarrhœa

There were three admissions notified as diarrhœa. Two of these were confirmed and the third case was revised to Sonne dysentery. All recovered.

Encephalitis Lethargica

There was one admission with this diagnosis. The patient was found to be suffering from cerebral hæmorrhage. This patient died, and at autopsy a congenital aneurysm was found to have ruptured.

Poliomyelitis

There were two admissions notified as poliomyelitis. In one the diagnosis was confirmed and in the other no evidence of any disease could be found. The poliomyelitis patient made a good recovery, with slight residual paresis.

Pneumonia

There were 20 patients admitted with a notified diagnosis of pneumonia. In thirteen of these the diagnosis was confirmed, the other seven required revision of diagnosis.

Whooping Cough

There were 498 admissions notified as whooping cough and of these 122 required revision of diagnosis, including 41 patients who had only bronchitis.

In all 382 cases of whooping cough were treated in the wards, including one notified as bronchitis ; 1 otitis media ; 1 pneumonia ; 1 miscellaneous observation ; 1 scarlet fever ; and 1 measles.

Concurrent infection occurred in 21 cases.

The principal complications were 87 broncho-pneumonia ; 32 gastro-enteritis ; 10 otitis media ; 10 convulsions ; 1 marasmus and fibrocystic disease of pancreas ; 1 streptococcal septicæmia following tonsillectomy and 8 enteritis.

Amongst the patients with complications 22 died.

Hospitality mortality, 5·76%.

Otitis Media

There were 44 admissions with this diagnosis and 16 of them required revision of diagnosis.

Chickenpox

The total admissions notified as chickenpox was 324, and of these 25 required revision of diagnosis of whom 9 had scabies and 5 suffered from impetigo.

Actually 315 cases of chickenpox were treated, including 8 notified as miscellaneous observations ; 2 dysentery ; 2 rubella ; 2 measles ; and 2 whooping cough.

Concurrent infection occurred in 11 cases.

One patient suffering from chickenpox developed encephalitis as a complication. All cases of chickenpox recovered.

Rubella

There were 139 admissions notified as rubella. In 113 the diagnosis was confirmed, and in the remaining 26 revision of diagnosis was found necessary, of whom 6 were found to be suffering from scarlet fever.

Actually 217 cases of rubella were treated during the year, including 2 notified as cerebro-spinal fever ; 24 scarlet fever ; 62 measles ; 1 mumps ; 14 miscellaneous observations ; and 1 Vincent's angina. There were no deaths from rubella.

Enteric Fever

There were 11 admissions notified as enteric fever. Revision of diagnosis was necessary in 9 of them.

The 2 enteric patients treated suffered from B. typhosus infection, and both recovered.

Dysentery

There were 234 cases notified as dysentery during the year and 128 of these required revision, of whom 95 were found to be suffering from enteritis, as no causative organism was found.

In all 149 cases of dysentery were treated, including 1 notified as pneumonia ; 1 diarrhœa ; 1 enteric fever ; 2 whooping cough ; 2 diphtheria ; and 36 miscellaneous observations.

The causative organisms were 81 B. dysentery Sonne ; 40 B. dysentery Flexner ; 12 B. dysentery Morgani ; 9 B. dysentery Newcastle ; and 7 irregular organisms.

There were 2 deaths in patients suffering from dysentery. One died from Pott's disease and the other pneumonia associated with Flexner dysentery.

Cerebro-Spinal Meningitis

The admissions under this heading numbered 89. Of these, 69 required revision of diagnosis, including 9 cases of tuberculous meningitis (all of whom died) ; 9 cases of pneumonia ; 12 cases of influenza ; and 3 cases of influenzal meningitis, all of whom died.

Two patients died from cerebro-spinal meningitis.

The hospital mortality was 10%.

Puerperal Fever

There were 55 patients admitted with a notified diagnosis of puerperal fever, 38 of which required revision of diagnosis, of whom 7 merely had mastitis and 16 suffered only from subinvolution of uterus.

There was 1 death from puerperal sepsis.

Hospital mortality, 5·88%.

Erysipelas

The number of cases notified as erysipelas was 112 and of these 3 required revising.

Actually 110 cases of erysipelas were treated, including 1 notified as miscellaneous observation.

One patient suffering from erysipelas died. She was an old lady with erysipelas superimposed on carcinoma of the right breast.

Pemphigus

There were 31 admissions notified as pemphigus, and 15 of them required revision of diagnosis ; 6 infants had septic spots only.

There were 2 deaths due to pemphigus neonatorum.

Hospitality mortality, 12·5%.

Miscellaneous Observations

There were 802 patients admitted to the wards for observation, and of these only 87 were found to be suffering from infectious diseases : 5 scarlet fever ; 36 dysentery ; 13 diphtheria ; 8 chickenpox ; 14 rubella ; 1 whooping cough ; 2 mumps ; 1 erysipelas ; and 7 measles.

The others suffered from a variety of conditions, including various minor ailments ; for instance there were 125 cases of tonsillitis, 139 cases of enteritis and 132 minor ailments.

Operations

There were 53 operations performed in the theatre, of which Mr. Gemmill performed 12, Mr. Scott Mason 20, and Mr. McMillan 6. The remainder—mostly minor surgery—were done by the resident medical officers.

The consultant surgeons also attended on many other occasions.

Nursing Staff

All members of the nursing staff are schick and dick tested soon after entering the hospital. There were 48 dick positive and 77 schick positive amongst the newcomers.

In addition the existing members of the staff are tested at six-monthly intervals.

All members of the nursing staff are immunised against enteric fever. Against scarlet fever 41 nurses were immunised, 63 against diphtheria and 117 against enteric fever.

There was no undue sickness amongst the members of the nursing staff.

Laboratory

The following is a summary of the work conducted in the hospital laboratory during 1944.

EXAMINATIONS

Diphtheria positive	728
Diphtheria negative	4,092
Streptococci haemolytic	25
Streptococci non-haemolytic	24
Streptococci none present	1,332
Streptococci not classified	1,032
Stools for non-lactose fermenters	2,052
Swabs of pus for organisms	36
Vincent's angina positive	48
Vincent's angina negative	68
Swabs of lochia	48
Swabs of ear	18
Pleural fluid	12
Sputum for T.B. positive	—
Sputum for T.B. negative	12
Urine bacteriological	72
Blood widal	48
Blood red cell, white cell and differential cell counts	42
Blood bacteriological	24
Blood other examinations	3
Cerebro-spinal fluid chlorides	17
Cerebro-spinal fluid protein	161
Cerebro-spinal fluid sugar	164
Cerebro-spinal fluid cell counts	162
Cerebro-spinal fluid microscopic	167
Cerebro-spinal fluid culture	165
Urines for albumen	377
Urines for sugar	377
Urines for microscopic examination of deposit	307
Urines for other examinations (bile, etc.)	88
Total examinations	11,701

PREVENTION OF BLINDNESS

General Outline of Facilities Available in the City

The arrangements continue substantially on the lines and over the same range of services as immediately before the war, except that the War bonus and allowance have been merged, as the bonus had remained fairly stable for a considerable period.

The number of Birmingham residents on the blind register at the end of 1944 was 643 males and 669 females, a total of 1,312, which is nine less than at the end of 1943.

REPORT ON TUBERCULOSIS

By Dr. J. E. Geddes, *Chief Clinical Tuberculosis Officer*

The Birmingham Public Health Committee maintains a single dispensary, centrally situated in the City, and provides 673 beds in four sanatoria for the treatment of all forms of tuberculosis in adults and children.

The beds are allocated as follows :—

	Men	*Women*	*Children*	*Total*
City Sanatorium, Yardley Green Road	164	52	119	335*
West Heath Sanatorium	63	87	—	150
Romsley Hill Sanatorium	75	45	—	120*
Salterley Grange Sanatorium	38	30	—	68
	340	214	119	673

* Inclusive of 36 observation beds in the City Sanatorium, Yardley, and 32 beds in the Romsley Hill Sanatorium rented to other authorities.

During 1944, 151 beds, not available since 1941 as a result of damage from enemy action, or because of shortage of staff, were re-instated, and by the end of the year the normal complement of beds was again available.

The introduction of mass radiography surveys and the augmented incidence of tuberculosis will intensify the need for additional beds. The number available in the City Sanatoria will be increased during 1945 by the erection of a ward of 56 beds at the City Sanatorium, Yardley Green Road, and a ward of 60 beds at the West Heath Sanatorium, with an appropriate extension of accommodation for staff.

The criteria by which the sanatorium accommodation must be judged are the elimination of waiting lists with the assurance of prompt treatment, and treatment of effectual duration for all patients referred to the department. The additional provision planned, and now in process of development, will make available one bed per 1,266 of the population, or one to each death per annum. The report recently issued by the Joint Tuberculosis Council recommends as an absolute minimum a ratio of three beds to two deaths per annum, and on this basis additional wards may still become essential.

The number of patients awaiting admission and the duration of treatment during 1944 are shown in the following statement :

	Average number of patients on waiting list each month.	*Average period on waiting list.*	*Average duration of Sanatorium treatment.*
Men	47	18 weeks	108 days
Women	58	17 ,,	133 ,,
Children	5	15 ,,	250 ,,

These are disquieting records. The average waiting period throughout the year was 117 days, and the duration of treatment could clearly be extended with considerable benefit. It is useless to tinker with the treatment of tuberculosis, and a short period of residential treatment is worthless.

The provision of additional beds is one part of the problem, the other and more formidable, the recruitment of an adequate staff of nurses. The shortage of staff in sanatoria is a malignant problem. The present grave position is likely, despite the pioneer work of the Tuberculosis Association, to be perpetuated until the " sanatorium " student nurse can participate in a scheme of training which offers comparable academic and practical rewards to those accessible to her colleague in the general hospital.

The recent proposals of the General Nursing Council, which sustain the principle of incorporation of tuberculosis within the general curriculum, with a rota of service between the sanatorium and the general hospital, indicate the proper direction of development.

The scheme of affiliation which is now in operation between the City Sanatoria and Dudley Road Hospital, and similar schemes throughout the country, at least provide the channel by which an integration of training for student nurses might be accomplished. The problem of how best to bring to fulfilment those cardinal changes is complex, and the place of the small sanatorium in any corporate plan an evident difficulty ; but the time is opportune, and the occasion certainly urgent, for the reorganisation of the tuberculosis nursing service.

Whatever final scheme of combined training evolves, a dominant responsibility remains with those charged with the conditions of employment and residence of the student nurse within the sanatorium. The fear of infection requires to be allayed and, whilst wise presentation of the facts will gradually create confidence, the burden of this factor will be most effectively dispelled by the knowledge that the conditions of employment are evidently such as to sustain health and promote physical and mental well being.

Notifications

The notification rate during 1944 for all forms of tuberculosis was 1·38 per 1,000 population, an increase in comparison with the figures for 1943 of 132 cases, or 0·10 per 1,000 of the population.

In comparison with 1943 the pulmonary rate has increased by 84 cases, or 0·06 per 1,000 of the population, and the non-pulmonary rate by 48 or 0·04 per 1,000 of the population.

Mortality

The mortality rate during 1944 for all forms of tuberculosis was 0·79 per 1,000 population, which represents in comparison with 1943 an increase of 32 deaths or 0·01 per 1,000 of the population.

The pulmonary mortality rate was 0·70 and the non-pulmonary rate 0·09 per 1,000 of the population.

The number of cases and deaths occurring in past years is shown in the following tables :

TUBERCULOSIS (All forms)

	New Cases	*Rate per 1,000 Population*	*Deaths*	*Death-rate per 1,000 Population*
1901—1910 (average)	—	—	1,309	1·65
1911—1920 ,, ...	—	—	1,284	1·46
1921—1930 ,, ...	1,824	1·91	1,031	1·08
1931—1935 ,, ...	1,459	1·43	928	0·91
1936	1,136	1·10	805	0·78
1937	1,119	1·07	836	0·80
1938	1,209	1·15	813	0·78
1939	1,036	0·98	885	0·84
1940	1,049	1·03	855	0·84
1941	1,073	1·13	850	0·90
1942	1,257	1·30	833	0·86
1943	1,239	1·28	750	0·78
1944	1,371	1·38	782	0·79

The relative prevalence and mortality from pulmonary and other forms of tuberculosis are shown in the two subsequent tables :

PULMONARY TUBERCULOSIS

	New Cases	*Rate per 1,000 Population*	*Deaths*	*Death-rate per 1,000 Population*
1901—1910 (average)	—	—	993	1·25
1911—1920 ,, ...	—	—	1,059	1·20
1921—1930 ,, ...	1,533	1·61	892	0·94
1931—1935 ,, ...	1,225	1·20	824	0·80
1936	962	0·93	734	0·71
1937	965	0·93	756	0·72
1938	1,011	0·96	732	0·70
1939	863	0·82	808	0·77
1940	899	0·88	786	0·77
1941	922	0·97	768	0·81
1942	1,069	1·11	745	0·77
1943	1,106	1·14	681	0·71
1944	1,190	1·20	696	0·70

NON-PULMONARY TUBERCULOSIS

	New Cases	Rate per 1,000 Population	Deaths	Death-rate per 1,000 Population
1901—1910 (average)	—	—	317	0·40
1911—1920 ,, ...	—	—	224	0·26
1921—1930 ,, ...	290	0·31	139	0·14
1931—1935 ,, ...	234	0·23	104	0·10
1936	174	0·17	71	0·07
1937	154	0·15	80	0·08
1938	198	0·19	81	0·08
1939	173	0·16	77	0·07
1940	150	0·15	69	0·07
1941	151	0·16	82	0·09
1942	188	0·19	88	0·09
1943	133	0·14	69	0·07
1944	181	0·18	86	0·09

The localisation of the disease in the case of the 86 deaths from non-pulmonary tuberculosis is shown in statement (a) and an analysis according to sex and age of all notifications and deaths is given in statement (b).

(*a*)

Tuberculous meningitis	43
Abdominal tuberculosis	7
Bone and joint tuberculosis	8
Disseminated tuberculosis	18
Tuberculosis of other organs	10

(*b*)

PULMONARY TUBERCULOSIS

	Male		Female	
Age	*Cases*	*Deaths*	*Cases*	*Deaths*
0—	3	2	4	3
1—	3	5	2	1
2—4	22	6	13	2
5—14	26	6	21	4
15—24	141	42	180	82
25—44	287	174	174	94
45—64	204	164	57	54
65—74	33	30	13	17
75 and above	6	7	1	3
	725	436	465	260

Total Cases, 1,190; Total Deaths, 696

NON-PULMONARY TUBERCULOSIS

	Male		Female	
Age	*Cases*	*Deaths*	*Cases*	*Deaths*
0—	2	3	4	4
1—	6	7	5	4
2—4	7	4	11	4
5—14	13	4	21	6
15—24	19	9	26	8
25—44	20	8	27	9
45—64	12	7	6	5
65—74	—	1	1	1
75 and above	1	2	—	—
	80	45	101	41

Total Cases, 181 ; Total Deaths, 86

Grand Totals : Cases 1,371

Deaths 782

NOTIFICATION RATE

Pulmonary Tuberculosis

The number of new cases of pulmonary tuberculosis notified during 1944, is the highest recorded figure since 1933, and is 327 or 38% above the notification rate for 1939.

There has been in comparison with 1943 an increase of 21 or 3% in the number of notifications for men and an increase of 63 or 15·6% for women. This increase in the respiratory form of the disease has disturbed the incidence in all age groups from 15 to 44 in females and from 5 to 44 in males.

Non-pulmonary Tuberculosis

The number of new cases of non-pulmonary tuberculosis notified during 1944 is only 8 or 4·6% above the notification figure for 1939, and 26 or 16·7% above the average incidence for the first four years of the war.

In the case of non-pulmonary tuberculosis the effect of recent infection may be delayed and higher incidence rates may be encountered in the future.

Non-notification

The number of deaths from non-notified pulmonary tuberculosis was 41 or 5·9%, and from non-pulmonary tuberculosis was 9 or 10·5%.

The percentage of non-notified deaths from all forms of tuberculosis was therefore 6·3 ; but in 27 cases the diagnosis was established following an autopsy and the corrected figure is 2·9% of the total deaths from all forms of tuberculosis. The comparable figure for 1943 was 4%.

MORTALITY RATE

Pulmonary Tuberculosis

In contrast with the figures of notification the death rate from pulmonary tuberculosis is comparable with the previous lowest rate which was recorded during 1938. This low rate, in the presence of a progressive increase in notifications during the war, may reflect a welcome

tendency to initiate treatment at an earlier stage; but the war-time impetus to the incidence of tuberculous pulmonary disease is likely to determine a fresh rise in the respiratory death rate.

Non-pulmonary Tuberculosis

The mortality rate from non-pulmonary tuberculosis does not reveal any change which warrants comment.

ANTI-TUBERCULOSIS CENTRE

Senior Assistant Tuberculosis Officer: **Dr. J. R. D. Todhunter**

The Anti-Tuberculosis Centre is open throughout the week, on Saturdays for half the day and one evening session is held.

The medical staff of the Centre, with the exception of Dr. Todhunter, who is responsible for the immediate direction of the general activities of the anti-tuberculosis centre, are also responsible for the administrative and clinical work of the municipal sanatoria.

The number of patients on the tuberculosis register on 31st December, 1944, was 5,558; the number transferred to other areas during the year, and the untraced cases numbered 217; the number transferred to this area from other areas and the untraced cases identified was 28.

During the year, 1,190 new cases of pulmonary tuberculosis were notified, and of that number 1,103 or 92·7% were examined at the Centre.

The range of work undertaken at the Centre is shown in the following statement:—

Attendances for consultation and examination	11,425
Attendances for supervision and treatment	579
Attendances for X-ray examination	14,263
Attendances for artificial pneumothrax treatment	3,713
Attendances for artificial light treatment	1,034
	31,014

These figures show no significant alteration in comparison with the records for 1943, with the exception that there is an increase of 2,013 in the number of attendances for radiological examination and an increase of 300 in the attendances for consultation and examination.

The following tables show the classification of and treatment recommended for patients examined at the Centre during the year:—

	Classification					
ADULTS	*Initial examination.*			*Mass Radio-graphy Suspects.*	*Re-examination.*	
	Newly notified.	*Contacts.*	*Suspects.*		*Old Cases.*	*Contacts and Suspects.*
Pulmonary:						
Group I	120	8	85	7	738	3
Group II	271	16	222	8	1,839	7
Group III	179	6	130	1	794	5
Non-Pulmonary:						
Group IV	60	—	17	—	181	—
No treatment required	191	528	3,264	37	36	304
	821	558	3,718	53	3,588	319

CHILDREN

	Initial examination.				*Re-examination.*	
	Newly notified.	*Contacts.*	*Suspects.*	*Mass Radio-graphy Suspects.*	*Old Cases.*	*Contacts and Suspects.*
Pulmonary :						
Group I	18	17	18	—	240	4
Group II	4	—	2	—	45	1
Group III	6	—	1	—	11	—
Non-pulmonary :						
Group IV	9	—	7	—	91	—
No treatment required	19	407	563	—	4	349
	56	424	591	—	391	354

Reference was made in the Report for 1943 to the large proportion of adult cases of pulmonary tuberculosis who, on initial examination, showed evidence of advanced disease. The figure for 1943 was 368, or 36·4% of the total adult cases of pulmonary tuberculosis referred to the Centre. The incidence of advanced cases for the year under review shows no appreciable amelioration and remains at 315 or 30·3% of the total cases submitted for examination. There is dire need for improvement, and the detection of the incipient case by Mass Radiography surveys must be supported by active and purposeful measures of prevention. The indiscriminate and casual employment of the stabilised " source " case should be impugned and facilities for sheltered employment made available for those patients. Regional municipal workshops, with a scale of wages and suitable houses which will promote the purpose of the industrial organisation, call for early development within the schemes of employment for the tuberculous patient now under consideration.

The wide-ranging activities directed towards the detection of the incipient and insidious case of pulmonary tuberculosis in factory and workshop become purposeless if no attempt is made to control sympathetically the place of employment of the chronic and known carrier of the tubercle bacillus.

Tuberculous infection of the community is being postponed until the later years of adolescence and, by the same token, measures of protection should be applied more faithfully and assiduously. Primary tuberculosis in the adolescent may be benign but, if there is at present no statistical evidence to warrant a categorical statement that malignant primary tuberculosis in the adolescent is more common, there is surely nothing to justify the omission of those measures which will safeguard the health of the young adult in his place of employment.

The number of advanced cases of pulmonary tuberculosis will respond favourably to measures directed towards the prompt detection of the early case, but within the compass of immediate endeavours the protection of the adolescent and young adult in home and factory from the known positive case of pulmonary tuberculosis must take a prominent position.

ADULTS

TREATMENT RECOMMENDED

	Initial examination.				*Re-examination.*	
	Newly notified.	*Contacts.*	*Suspects.*	*Mass Radio-graphy Suspects.*	*Old Cases.*	*Contacts and Suspects.*
Sanatorium treatment	445	24	338	10	298	12
Dispensary treatment	9	—	1	—	20	—
Supervision	54	2	23	5	727	—
Out-patient, light treatment	7	—	7	—	14	—
Domiciliary treatment	113	4	88	1	1,598	3
No treatment required	193	528	3,261	37	931	304
	821	558	3,718	53	3,588	319

1,103 new cases of pulmonary tuberculosis were examined and of that number 870, or 78·8% were admitted to the sanatoria.

CHILDREN

	Initial examination			*Re-examination*	
	Newly notified	*Contacts*	*Suspects*	*Old Cases*	*Contacts and Suspects*
Sanatorium treatment	29	13	21	11	3
Dispensary treatment	—	2	—	2	—
Supervision	5	—	5	254	2
Out-patient light treatment	—	—	—	2	—
Domiciliary treatment	3	1	2	26	—
No treatment required	19	408	563	96	349
	56	424	591	391	354

Contacts

The records which have been submitted from this department for a considerable number of years illustrate the value accruing from the examination of contacts.

The conception of the entire household as the smallest effective unit for the survey requires, if the work is to be properly discharged, the examination and re-examination of several thousands of contacts annually or at more frequent intervals. The amount of work is clearly enormous, and could only be effectively met by a large medical staff. The recently introduced method of miniature radiography will ultimately be used for the examination of contacts and a more exact control obtained of a group of the population whose liability to infection is great and in which the incidence of tuberculosis is considerable.

In the succeeding tables are set out certain details of the number of contacts who were referred to the Centre for examination. The exigencies of war time have adversely affected this important phase of dispensary work, and the persistence of home conditions which perpetuate the liability to infection largely nullifies the advantages which should attend a particularly significant section of anti-tuberculosis service.

CONTACTS EXAMINED DURING 1944.

	Total No. of cases		Contacts to patients with sputum containing tubercle bacilli		Contacts to patients with negative sputum	
0 to 5 years.						
Tuberculous	12	6·4%	8	66·7%	4	33·3%
Non-tuberculous	176	93·6%	105	59·7%	71	40·3%
	188		113		75	
6 to 10 years.						
Tuberculous	5	3·7%	3	60%	2	40%
Non-tuberculous	129	96·3%	75	58·1%	54	41·9%
	134		78		56	
11 to 15 years.						
Tuberculous	4	3%	2	50%	2	50%
Non-tuberculous	128	97%	65	50·8%	63	49·2%
	132		67		65	
16 years and over.						
Tuberculous	25	4·7%	16	64%	9	36%
Non-tuberculous	503	95·3%	258	51·3%	245	48·7%
	528		274		254	

It is of interest to compare the incidence of active tuberculosis in these contacts (11 years and above) with the number detected by examination under the mass radiography scheme. The figures are 4·4% and 0·36% respectively.

Dental Treatment

The part-time services of a dental surgeon are available at the Centre. The treatment is conservative in type but patients who wish to provide their own dentures can do so under advantageous conditions by arrangement with the dental surgeon.

The following statement shows the work undertaken :—

Extractions	356
Scalings and fillings	4
Dentures	17

Artificial Light Clinic

The number of patients who completed a course of treatment is shown in the following table :—

	Adult males	*Adult females*	*Boys*	*Girls*
Bone and joint tuberculosis	1	6	5	—
Abdominal tuberculosis	—	3	—	—
Cervical adenitis	2	—	—	—
Tuberculosis of other organs	6	—	—	—
	9	9	5	—

Work of the Tuberculosis Visitors

There are ten nurses engaged as Tuberculosis Visitors in the department. The visitors are concerned with the domiciliary welfare of the patient ; the range of their duties is wide, and the character of the work varied. It is their primary duty to make enquiry into every case of tuberculosis, and maintain by regular visits close contact with the patient in his home.

After-care, in all its aspects, is the concern of the Visitor, and an indication of the scope of the work is shown in the following statement.

The decision to correlate allowances with treatment was in many respects a satisfactory one, but it has added considerably to the work of the visitors. The amount of work, particularly with the acceptance of responsibility by the Public Health Committee for the payment of allowances, irrespective of their source, to all eligible tuberculous patients, has been considerable. The arrangement has, however, been successful, and a particularly onerous responsibility satisfactorily discharged by the Visitors, and also by those members of the clerical staff deputed to deal with allowances.

VISITS PAID BY TUBERCULOSIS VISITORS DURING 1944

Primary visits (to new cases)	1,672
Routine re-visits	20,351
Special visits and re-visits	6,485

The following statement gives an indication of certain of the after-care activities of the department :—

Beds issued	124
Chalets provided	14
Grants of food made	57
Grants of clothing and nursing appliances	248
Number of fares paid for patients	62
Allowances granted	499

(The provision of chalets is governed by the fitness of the patient to sleep or rest unattended for prolonged periods out of doors).

The close co-operation existing between the Anti-Tuberculosis service, the School Medical Officer's department, and the Maternity and Child Welfare department, is welcome, and has provided opportunities for the after-care service to be widely applied.

Disinfection

The disinfection of 1,577 houses where a member of the family had suffered or died from tuberculosis, or changed his or her address, was undertaken during the year.

Housing

The housing problem during the year has continued to be an acute one, and only the most urgent cases have been referred to the Estates Department. The restriction in the number of applications submitted has demanded considerable ingenuity on the part of the Visitor in advising the family with regard to the best use of existing and often inferior accommodation.

The success of the work of the Anti-Tuberculosis service is intimately related to the facilities available for the prevention of the spread of infection, and in this connection the provision of suitable accommodation for the tuberculous patient and his family takes a prominent place.

The close liaison which has existed with the Estates Department has been material to the proper fulfilment of the work of the anti-tuberculosis service. The policy of giving priority in re-housing to the tuberculous patient, which was established in previous years, and necessarily discarded at present, must be vigorously pursued at the earliest practicable date.

Action under Legal Enactment

It was unnecessary during the year to take action under the Public Health (Prevention of Tuberculosis) Regulations, 1925, relating to tuberculous employees in the milk trade ; nor was Section 172 of the Public Health Act, 1936, employed to remove any patient, compulsorily, to a Sanatorium.

Allowances

Allowances were introduced in Birmingham during September, 1943.

The restricted application of the allowances payable in accordance with the provisions formulated in the official memorandum 266/T creates anomalies. Arrangements were made during the year whereby the disbursement of allowances to all eligible tuberculous patients became the immediate responsibility of the Public Health Committee. This broadening of the basis of responsibility has had the effect of minimising anomalies inherent in the official (Memo. 266/T) scheme.

Number of applications received January to December, 1944.

Total applications received	778
Allowances granted	371 or 47·6%
Allowances not granted	407 or 52·4%

Reason for rejection.	*Number*	*Percentage of total applications*
Chronic cases	158	20·3%
Treatment recommended not accepted	26	3·4%
Ineligible for financial and domestic reasons	61	7·9%
Employed at date of application	35	4·5%
Applicant in Sanatorium and without dependants.....	127	16·3%
	407	52·4%

Reference has been made in an earlier part of this statement to the form of procedure adopted in the payment of allowances to tuberculous patients. Allowances to the number of 128 were made available to patients not eligible under the Memo 266/T. Scheme.

SANATORIA.

	Matron.	*Medical Superintendent.*
Yardley Green Road Sanatorium :	Miss W. Davies.	Dr. J. E. Geddes.
West Heath Sanatorium :	Miss E. G. Davis.	Dr. J. McWm. Taylor.
Romsley Hill Sanatorium :	Miss D. Lee	Dr. D. J. Peebles.
Salterley Grange Sanatorium :	Miss M. Ross.	Dr. D. C. Waddy.

Staff

Comment has been made in an earlier section of this report on the difficulties which have been experienced in the general recruitment of staff. This shortage has greatly increased the work and responsibilities of the matrons and senior administrative nursing officers of the City Sanatoria. I have satisfaction in recording the very able manner in which over the year they have allocated the reduced staff to the various departments, and by their own competence and keenness ensured the maximum efficiency in circumstances of real difficulty.

School of Training

During the year three sister tutors were appointed to inaugurate the combined affiliated school of training, and despite the reduction in the number of student nurses during the latter part of the year headway has been made.

The following table shows the duration and result of treatment of 1,068 patients discharged from the municipal sanatoria during the year 1944 :—

RESULTS OF TREATMENT IN PATIENTS DISCHARGED FROM SANATORIA DURING THE YEAR 1944

Classification on admission.		Condition on discharge.	Under 3 months but exceeding 28 days.			Duration of residential treatment in the Sanatoria: 3—6 months			6—12 months			More than 12 months			Totals			Grand Totals
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Pulmonary Tuberculosis	T.B. Minus	Quiescent	10	5	4	13	9	11	3	3	8	1	—	1	27	17	24	68
		Not quiescent	43	29	3	39	38	5	7	3	7	4	3	1	93	73	16	182
		Died in Sanatoria	1	1	1	2	1	1	—	1	—	—	—	—	3	3	2	8
	T.B. plus Group I	Quiescent	—	—	1	—	2	3	—	1	4	—	—	2	—	3	10	13
		Not quiescent	12	4	—	7	7	1	10	6	2	1	1	1	30	18	4	52
		Died in Sanatoria	—	—	—	—	1	—	—	—	—	—	—	1	—	1	1	2
	T.B. plus Group II	Quiescent	—	—	—	1	1	—	1	—	—	—	—	—	2	1	—	3
		Not quiescent	104	32	—	84	59	1	27	28	—	7	10	1	222	129	2	353
		Died in Sanatoria	12	3	—	8	10	—	3	3	1	—	3	—	23	19	1	43
	T.B. plus Group III	Quiescent	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	1
		Not quiescent	60	17	—	47	17	—	24	6	—	11	5	—	142	45	—	187
		Died in Sanatoria	23	31	1	18	12	—	12	5	—	7	1	—	60	49	1	110
		Totals	265	122	10	219	158	22	87	56	22	31	23	7	602	359	61	1022
Non-Pulmonary Tuberculosis	Bones and Joints	Quiescent	—	—	—	3	—	—	—	—	—	—	—	2	3	—	2	5
		Not quiescent	2	—	—	3	2	—	1	—	—	2	2	3	8	4	3	15
		Died in Sanatoria	—	—	—	—	—	1	—	—	—	—	1	—	—	1	1	2
	Abdominal	Quiescent	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	1
		Not quiescent	—	3	—	—	—	—	—	1	—	—	—	1	—	4	1	5
		Died in Sanatoria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Other organs	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Not quiescent	1	1	—	2	1	—	—	—	—	—	—	—	3	2	—	5
		Died in Sanatoria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Peripheral Glands	Quiescent	—	—	—	—	—	2	—	—	4	—	—	—	—	—	6	6
		Not quiescent	2	—	1	2	—	1	—	—	1	—	—	—	4	—	3	7
		Died in Sanatoria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Totals	5	4	1	10	4	4	1	1	5	2	3	6	18	12	16	46

" Quiescent " disease indicates that there are no symptoms or signs of tuberculous disease except such as are compatible with a completely healed lesion, and in which sputum, if present, is free from tubercle bacilli.

Average duration of stay

108 days for adult males.

133 days for adult females.

273 days for boys.

228 days for girls.

The above figures exclude patients admitted for observation who were in residence for a short period, and cases with advanced disease who died within a few days following admission.

Observation Beds

The Anti-Tuberculosis Scheme includes 36 beds at the City Sanatorium for observation and investigation. " Observation " patients are those who, after careful and repeated examinations at the Centre, are found to be indefinite either as to the absence or presence of tuberculosis or as to its activity or otherwise when present.

Of the 1,336 patients discharged from the sanatorium 151 or 11·3% were admitted primarily for observation to the Yardley Green Road Sanatorium. The results of the investigation are shown in the following table :—

	For Pulmonary Tuberculosis						*For Non-Pulmonary Tuberculosis*						*Totals*		
Diagnosis on discharge from observation ward	*Stay under 4 weeks*			*Stay over 4 weeks*			*Stay under 4 weeks*			*Stay over 4 weeks*					
	M.	*F.*	*Ch.*	*M.*	*F.*	*Ch.*	*M.*	*F.*	*Ch.*	*M.*	*F.*	*Ch.*	*M.*	*F.*	*Ch.*
Tuberculous	11	6	17	4	1	15	—	2	2	—	—	1	15	9	35
Non-tuberculous	29	12	4	17	6	17	—	—	—	—	—	—	46	18	21
Doubtful	4	1	1	—	—	—	—	—	1	—	—	—	4	1	2
	44	19	22	21	7	32	—	2	3	—	—	1	65	28	58

Hospital Beds

The scheme is fortunate in that it has a considerable number of beds for the care and treatment of the patient with advanced pulmonary disease. These beds are invaluable as a prophylactic asset in connection with the maintenance of the public health of the City.

During the period under review there were 782 deaths in the City from all forms of tuberculosis, and of this number 388 or 49·6% occurred in the Municipal Sanatoria or in Hospitals controlled by the Public Health Committee.

Thoracic Surgery

The work of the thoracic surgical unit was again interrupted during the early part of the year, when Mr. Leigh Collis left for service with the R.A.M.C. He had given liberally of his time to the preliminary organisation of the department.

Mr. Milnes Walker was appointed during May, 1944. The surgical work has been very considerably extended under his direction.

Thoracic surgical treatment for patients in the Municipal sanatoria is concentrated at the City Sanatorium, Yardley.

The surgical ward for pre-operative and post-operative treatment was completed during June, 1944, and has been fully occupied throughout the year.

The number of operations performed during the year was as follows:

Amputations	3
Crushing of phrenic nerve	22
Thoracoscopy	41
Thoracoplasty	16
Extra-pleural pneumothorax	1
Cystoscopy	3
Bronchoscopy	3
Excision glands of neck	5
Artificial pneumothorax inductions in sanatoria	180

I desire to record the very great advantage derived from the visits of Mr. J. B. Leather, the Consultant Orthopædic Surgeon, and Mr. Milnes Walker, the Consultant Thoracic Surgeon.

X-Ray Department—City Sanatorium

The following table shows the number of radiograms taken during the year:—

Pulmonary	1,165
Bronchograms	51
Pyelograms	80
Bone and joint	491
Pregnancy	4
Barium meals	7
	1,798
Pulmonary radioscopy	2,139
Total X-ray work	3,937

Laboratory Service

A list is appended of the various specimens examined during the year.

Sputum : (for tubercle bacilli)	Ordinary examination	9,762
	Culture	111
Sputum : (for predominant organisms)		27
Gastric contents : (for tubercle bacilli)	Animal inoculation	147
Faeces : (for tubercle bacilli)	Ordinary examination	435
	Culture	7
	Animal inoculation	1
Pleural effusion :	Ordinary examination	29
	Culture	60
	Animal inoculation	40
	Chemical	8
Urine :	Ordinary examination	2,784
	Culture	53
	Animal inoculation	61
	Urine urea	41
Blood :	Urea	51
	Sugar	6
	Wassermann	31

These examinations have been performed at the City Sanatoria, the Centre, and the City Laboratories.

Pregnant Tuberculous Women

The care of tuberculous pregnant women is most effectively discharged by the adoption of sanatorium treatment during pregnancy and after parturition. Facilities for the supervision of these patients within the sanatorium are on the whole ill-developed.

The woman with quiescent pulmonary disease will usually, under the favourable auspices of the sanatorium, successfully withstand the added stress of pregnancy, and for those with unstable pulmonary disease any potential danger of dissemination will be minimised by the adoption of a sanatorium regime with, where advisable, appropriate forms of collapse therapy.

There is, however, need to associate the special services available for these women. During the year arrangements were made with Dr. Mackintosh whereby the supervision of these patients became the joint responsibility of Dr. Crosse, of the Maternity and Child Welfare Department, and the Medical Superintendents of the sanatoria. The scheme was introduced during February, and by the end of the year 17 patients had taken advantage of the arrangements.

At present the continuity of supervision is unfortunately broken because of the absence of a labour ward in the sanatoria, but this defect will be rectified.

School

Staff: Headmistress and two assistant teachers.

The general organisation and curriculum were mentioned in the report for 1943. No alteration of significance has been made during the year. The school rooms have been re-opened and are now regularly in use. The curriculum is comprehensive and the ancillary activities so varied that the child is enabled to share in many of the activities which would ordinarily apply in a home environment. The Guide and Scout work continues under the direction of Mrs. McBroom and the Rev. Mr. Maclean, and have become a main interest of the children during recreation hours.

Number of children on roll, 1st January, 1944	41
Number admitted	36
Number discharged	28
Number of children on roll, 31st December, 1944	49

Rehabilitation

The Disabled Persons (Employment) Act, 1944, will, if energetically applied, extend the present provision for the tuberculous patient in a direction in which previous work has been haphazard and ineffectual.

During the year occupational therapy within the sanatoria and in the municipal workshop, which was established by Dr. Dixon twenty-five years ago, has been consistently developed.

Diversional therapy is established in all wards, and craft classes are held for men and women. A book-keeping class and a boot repairing class have been inaugurated by arrangement with the Director of Education. With the assistance of the Ministry of Information, the Economic League and the Workers' Educational Association, weekly lectures have been held. A loud speaker relay apparatus has extended the advantages of these lectures to patients confined to the wards.

The value of this "indoor" rehabilitation is, however, largely dissipated because of the absence of facilities of a comprehensive character for the large number of patients who require on discharge a prolonged period of modified work to assist and sustain their full recovery, and of workshops for those patients permanently precluded from employment under ordinary industrial conditions.

The absence of these facilities has to some extent been mitigated by the co-operation of Mr. Pass, Manager of the Ministry of Labour Services in Birmingham. He has selected three Labour Exchanges within the City as "clearing houses" for the employment of the tuberculous patient, and by reason of this association patients to the number of 75 have obtained work suitable to their sub-standard physical condition.

Mass Radiography

Mass Radiography surveys were introduced in Birmingham during October, 1944, and by March, 1945, 13,692 visitors had been examined.

A central Mass Radiography Department, under the immediate direction of Dr. Halliday Sutherland, has been established in Corporation Street. The unit will operate from there, from within factories, and also from sites on the periphery of the City.

The organisation of the mass radiography department has been developed in close collaboration with the tuberculosis service, and as the primary and recognised purpose of these group surveys is the detection of pulmonary tuberculosis this liaison seems desirable and without prejudice to the proper fulfilment of the work of the unit.

The fullest and widest use of the Anti-Tuberculosis Centre for the examination of suspects must remain an integral element of dispensary work, and it would be a harmful arrangement which created a division of supervision between the suspects from the mass radiography unit and those detected by the vigilance of the medical practitioner.

The abnormal miniature film does not provide a basis for accurate diagnosis, but the information obtained from a large film and preliminary clinical examination is sufficient to allow of the proper disposal of the visitor.

Visitors referred from the mass radiography department with a tentative diagnosis of pulmonary tuberculosis are examined at the Anti-Tuberculosis Centre after reference to and following a brief clinical statement from the practitioner. This procedure has been of advantage, and has in no way retarded the examination at the Anti-Tuberculosis Centre. It has enabled the practitioner to obtain knowledge of all cases detected within his practice with a suspicious large film, and the clinical statement obtained from the practitioner has been of advantage to the Tuberculosis Medical Officers.

A brief statement is submitted from the executive medical officer of the unit to the Anti-Tuberculosis Centre in those cases where the clinical and radiological results indicate the presence of a cardiac lesion unbeknown to the patient or a pulmonary lesion clearly of a non-tuberculous character. The majority of patients with a cardiac lesion are already under the supervision of their medical practitioner, and in those cases no further action is taken, but in the others an appropriate statement is forwarded from the anti-tuberculosis centre to the medical practitioner.

This procedure has observed the principle of the unit as an adjunct of the tuberculosis service with the Centre as the pivotal point of the general organisation. The administrative unity thus preserved, together with the congregation of all tuberculous suspects under one organisation, specifically developed for this purpose, is of considerable advantage.

Preliminary publicity, with wise presentation of the purpose of the surveys, constitutes not the least responsible part of the work, and the

dominant argument—the detection and prompt treatment of early tuberculosis—must not be weakened by shortage of beds or inability to use beds by reason of shortage of staff. Unfulfilled promises will be most damaging, and will bring disrepute upon a form of examination which is particularly dependent on the confidence of the public. The general publicity has meant a very great deal of work, and has been most successfully undertaken by Dr. Halliday Sutherland.

The number of examinations which can be undertaken is limited, and with one unit engaged exclusively in sifting the abnormal from the normal is unlikely to exceed 60,000 per annum. The advantages of miniature radiography can only be made available now to a small section of the population of the City, and the maximum benefits will depend on a careful selection of the groups submitted for examination.

The known considerable incidence of pulmonary tuberculosis in early adult life, and in contacts, suggests profitable groups for examination. It was, however, considered desirable that the surveys during the first year should be comprehensive in character and extend beyond those groups where the occurrence of tuberculosis was known to be significant. The more general information obtained, supported by knowledge gathered from the operation of other units, will be of considerable value as a guide to the proper use of a method of examination which holds such good promise for the earlier diagnosis of pulmonary tuberculosis.

The programme drafted for the initial surveys is as follows :—

(a) Employees (all age groups), in two large factories (1 and 2), with well organised medical departments.

(b) University students.

(c) Employees (all age groups), in two departments of the Local Authority.

(d) School leavers.

(e) Civil servants (all age groups).

(f) Employees (all age groups) of a large warehouse.

(g) Re-examination of selected age groups from those originally examined in factory (a) 1.

The apparatus, designed by Messrs. Watson and Sons, has been most satisfactory, and the transport of the unit has not presented any particularly difficult problem. It is not readily mobile, but within our experience in an industrial area this has not created any real limitation of its usefulness.

The routine of examination of visitors, and the method of recall for large films and clinical examination at the mass radiography centre, have observed the general directions outlined in the official report.

The response to mass radiography has been good and the co-operation of employers and employees readily obtained.

The following tabular statement shows the main statistical facts of the initial surveys :—

GENERAL STATISTICS—STATEMENT I

Number of Miniature Films taken.	Number of abnormal Miniature Films.	Number of faulty Miniature Films (technical).	Total abnormal Miniature Films.	Percentage of visitors originally examined.
13,762	1,195 (8·6% of those originally examined).	206 (1·4% of those originally examined.)	1,401	10%
Number of abnormal Miniature Films.	Number of large Films taken.	Number of visitors who did not respond to invitation for large Film.	Number of abnormal large Films.	Percentage of visitors originally examined.
1,401	1,368	33 (2·4% of total recalls for large Films–.	538	3·9%
Number of abnormal large films.	Number of visitors with abnormal large films judged to be of no clinical significance.	Number of visitors called for clinical examination, Mass Radiography Department.	Number of visitors who accepted invitation for clinical examination.	Percentage of visitors originally examined.
538	165 (30·6% of total abnormal large films).	373 (69·4% of total abnormal large films).	367	2·6%
Number of visitors who attended Mass Radiography Dept. for clinical examination.		Number of visitors who did not respond to invitation for large film or clinical examination.	Number of visitors referred for further investigation.	Percentage of visitors originally examined.
367		39 (0·28 of those originally examined).	168	1·2%

These figures show that :—

(*a*) 10% of the visitors were recalled for a large film.
(*b*) 2·6% of the visitors were recalled following the large film for clinical examination.
(*c*) 1·2% of the visitors were referred from the unit for further investigation.
(*d*) Only 0·28% of the visitors failed in co-operation.

The number who declined the invitation to attend for clinical examination was only 6 or 1·6% of the visitors recalled for clinical examination. This evidence of co-operation is satisfactory, and has not only characterised the initial recalls, but has been equally evident in those visitors referred for later investigation to the anti-tuberculosis centre.

The disposal of those 168 visitors referred from the unit for further investigation is shown in the following statement :—

Total	No treatment required.	Supervision from Anti-Tuberculosis Centre.	Admission to Sanatorium.	Observation in Sanatorium.	Failed to attend for further examination.	Referred to Tuberculosis Officer outside the Birmingham area.	Referred to General Practitioner.
168	35	71	33	6	3	9	11

An indication of the additional work which will devolve on the Dispensary can be gathered from this table. If the estimated annual total of 60,000 examinations is attained, some 309 patients will be added to the dispensary lists, and some 170 admitted to the Sanatorium each year.

The number of cases of tuberculosis detected was as follows :—

		Number.	*Percentage of those originally examined.*	
(*a*)	All groups (including healed primary foci)	195	1·4%	
(*b*)	Number of tuberculous cases referred for further investigation	130	0·9%	
(*c*)	Number of cases of active pulmonary tuberculosis	50	0·36%	
	(1) Post primary tuberculosis	49	0·35%	0·36%
	(2) Primary tuberculosis	1	0·01%	
(*d*)	Number of cases of active pulmonary tuberculosis with sputum positive for tubercle bacilli	16	0·11%	

The number of cases of active pulmonary tuberculosis detected was 50, or 0·36% of those initially examined.

Those examined have not been representative of all age groups, or of all social grades, but on a broad analysis the results suggest that within the City there are some 2,700 undetected cases of active pulmonary tuberculosis, and 860 individuals voiding tubercle bacilli in their sputum unknown to their medical practitioner or to themselves.

The number of cases of active pulmonary tuberculosis detected does not justify any final analysis, but the relevant facts so far elicited are of interest, and are shown in the following statement :—

Type of Lesion.	*Number of cases.*	*Average Age.*	*Symptoms.*		*Sputum.*		*Family History.*	
			Nil.	*General or Local.*	*Nil or Negative*	*Positive.*	*Yes.*	*No.*
Assmann's focus	12	29	9	3	11	1	—	12
Fibro-caseous	17	43	—	17	7	10	4	13
Infiltrative	14	30	7	7	11	3	2	12
Infiltrative with healed primary complex	4	25	4	—	4	—	1	3
Infiltrative with cavity formation	2	25	—	2	—	2	1	1
Pleural effusion	1	26	—	1	1	—	—	1

Symptoms

The value of symptoms in early pulmonary tuberculosis has rightly been doubted, but a considerable number of these cases not only with advanced, but with early tuberculosis, have volunteered the information of cough with sputum, and the number who have added breathlessness to their symptoms has been of interest. The difficulty of discrimination between spurious and valid symptoms is great and emphasises the difficulties which must attend the practitioner in his analysis.

Chronic Tuberculosis

Seventeen cases of chronic and extensive tuberculosis have been detected. All had pronounced symptoms, but all were satisfied that their disability was due to bronchitis, and some were negligent in their appreciation of the need to report these symptoms to the medical practitioner. Even if the purpose of mass radiography surveys were restricted to the detection of those cases whose tuberculosis is protected by the easy title of bronchitis, few would deny the value of such surveys, particularly where communal infection is being postponed to the later years of adolescence.

Chronic Nodal Tuberculosis

The number of obsolete cases of nodal tuberculosis detected during the surveys has been considerable, but later practice will probably require no more than a record of the lesion and the transfer of the information to the medical practitioner.

Classification

A bare tabulation of radiological appearances may be very misleading ; there are so many variants in the capacity of each individual to restrain his tuberculous infection. Nevertheless, an adequate classification of the radiological pattern of these early lesions is required if full advantage is to accrue from these elaborate radiological surveys. The present classification used for the completion of the official cards is too broad, and could with advantage be extended to contain a more detailed analysis of the form and site of the early symptomless lesion.

The following table shows the more important facts of the non-tuberculous cases detected during the initial surveys :—

(*a*) PULMONARY FIBROSIS	*Total.*	*Upper Zone.*	*Lower Zone.*	*Bilateral.*	Number of those visitors with history of pneumonia or significant catarrhal respiratory illness.
	41	10	13	18	31
(*b*) CHRONIC PLEURISY		Costo-phrenic	Interlobar	Peripheral	Number of those visitors with history of pneumonia, pleurisy or empyema.
	13	7	1	5	11
(*c*) BRONCHIECTASIS		Bilateral (Basal)	Unilateral (Basal)	Upper Zone	Number of those visitors with symptoms and under medical supervision.
	2	—	2	—	2
(*d*) PNEUMONOKONIOSIS	24				
(*e*) ACQUIRED CARDIO VASCULAR LESIONS		Mitral	Aortic	Hypertensive or Reynaud's disease.	Number of those visitors with symptoms and under medical supervision.
	29	23	5	1	23
(*f*) CONGENITAL CARDIAC LESIONS					Number of those visitors with symptoms and under medical supervision.
	2				0

Final comment on the value of mass radiography must await the accumulation of a larger volume of information, but the present indications are at least favourable. The detection of incipient tuberculosis has been the governing principle of the mass radiography scheme, and its justification is suggested in the considerable occurrence of those cases within the compass of a small survey.

The mass radiography team is constituted as follows :—

1 Executive medical officer.
2 Radiographers.
1 Dark room technician.
1 Marshaller.
1 Senior clerk.
4 other clerks.

I desire to record the very great advantage derived from the visits of Dr. James Brailsford, the Consultant Radiologist.

SUMMARY

(1) In comparison with 1943 there has been an increase of 132 in the number of cases of tuberculosis—84 pulmonary and 48 non-pulmonary.

(2) In comparison with 1939 there has been an increase of 327 in the number of cases of pulmonary tuberculosis.

(3) The mortality rate for pulmonary tuberculosis equals the lowest rate previously recorded (1938).

(4) 93% of the pulmonary cases notified were examined at the Centre.

(5) 30% of the primary cases examined at the Centre had advanced pulmonary disease.

(6) Allowances to the number of 371 were made available to patients under the Memo. 266/T. scheme.

(7) The Mass Radiography Scheme was introduced, and over a period of five months 13,762 visitors were examined.

(8) 1,336 patients were discharged from the City sanatoria.

(9) A scheme was introduced for the more complete supervision of pregnant tuberculous women.

(10) Facilities for rehabilitation were extended.

VENEREAL DISEASES

There was a turn for the better in the venereal disease statistics for 1944, for, as shown below, the numbers of new cases of syphilis and of gonorrhœa attending the clinics showed in both groups a very appreciable decline. While, as indicated in last year's report, the decline in gonorrhœa may be fictitious, through the development of methods of treatment applicable by the private medical practitioner, the drop in syphilis incidence is likely to be genuine, and may be significant. There has also been a welcome reduction in the numbers of those ceasing to attend before completion of treatment.

	New Cases			
	Syphilis	*Soft Chancre*	*Gonorrhoea*	*Other Conditions*
General Hospital	494	—	686	2,645
Children's Hospital	7	—	3	43
Lancaster Street	80	—	45	1,873
Birmingham Infirmary	23	—	31	22
TOTAL	604	—	765	4,583

The following table gives the corresponding data over a period of ten years :

	Syphilis	*Soft Chancre*	*Gonorrhoea*	*Other Conditions*
1935	428	20	882	1,887
1936	353	7	971	1,988
1937	326	1	1,011	2,233
1938	346	—	955	2,423
1939	330	1	948	2,282
1940	318	1	835	1,957
1941	343	4	940	2,261
1942	515	2	1,030	2,906
1943	685	—	878	4,816
1944	604	—	765	4,583

The attendances for " other conditions," while less than in 1943, still maintain a high level, and show that the steady publicity campaign is arousing a recognition of the importance of venereal infection.

The total attendances for treatment are indicated below :

1935	121,788	1940	75,936
1936	124,387	1941	73,175
1937	125,408	1942	83,776
1938	131,611	1943	97,973
1939	88,083	1944	92,915

Further particulars of the work done at the Centres in 1944 are as follows :

	Syphilis.	*Soft Chancre.*	*Gonorrhoea.*	*Other Conditions.*
No. of cases under treatment, Jan. 1st, 1944.....	1,490	—	428	1,071
New cases under treatment during year	604	—	765	4,583
Total attendances	39,737	1	15,921	37,256
No. discharged after completion of treatment and observation	188	—	414	4,419
No. transferred to other centres	181	1	87	23
No. who ceased to attend: Before completion of treatment	167	—	84	—
After completion of treatment but before final tests as to cure	48	—	87	—

No. of cases of congenital syphilis treated :

Uuder 1 year of age	11	Aged 5–15 years	6
Aged 1–5 years	6	Aged 15 years and over	43
TOTAL	66		

The corresponding number in 1943 was 85.

Contact Tracing

Three health visitors have been engaged part-time in following up women alleged to have transmitted infection under Defence Regulation 33B. In the event of the contact named being a male, a male sanitary inspector undertakes this visitation. Regulation 33B requires that a person named as the contact by two separate sufferers from venereal disease shall undergo medical examination, and if necessary, treatment, and failure to do so constitutes an offence. The number of persons twice named, and so coming within the scope of the Regulation, is small, and the procedure is to visit the contact and persuade to attend voluntarily at a clinic for examination ; an official notice to attend is served only on refusal to go voluntarily.

Many more persons are named on a single occasion only, and hence do not come within the scope of the Regulation. These contacts also are visited by the Social Workers, and where possible are persuaded to attend voluntarily at a clinic for examination. This work is, of course, of a strictly confidential nature ; in the case of male contacts the visit is made by a sanitary inspector. The large number of untraced cases shown in the following table results from the very incomplete information which is frequently given.

		Men.			*Women.*	
		Infected.	*Not Infected.*		*Infected.*	*Not Infected.*
No. of contacts named under Reg. 33B (*two* Forms 1)	0			6		
Visited	—			5		
Attended clinic voluntarily	—	—	—	3	3	0
Attended clinic after service of Form 2	—	—	—	2	2	0
Not traced	—			1		
Prosecuted under Reg. 33B.....				0		
For failure to attend for examination	—			0		
For failure to receive or continue treatment	—			0		
No. of contacts named on a *single* Form 1	19			126		
Visited	5			67		
Attended clinic	5	4	1	56	41	15
Refused to attend clinic	0			11		
Not traced or lost sight of	12			59		

Educational Work

This has been merged in the wider aspect of Health Education as a whole, and receives reference in the Maternity and Child Welfare section of this Report.

TABLE I VITAL STATISTICS DURING 1944 AND PREVIOUS YEARS

YEAR	Population Estimated to middle of each year	Birth-rate	Death-rate	Infant Mortality rate per 1,000 Births	DEATH-RATES PER 1,000 OF POPULATION FROM																DEATH-RATES PER 1,000 LIVE BIRTHS			
					Enteric Fever	Small Pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Tuberculosis: Respiratory	Tuberculosis: Other Forms	Cancer	Diseases of Nervous System	Diseases of Circulatory System	Diseases of Respiratory System	Diseases of Digestive System	Diseases of Genito-Urinary System	Suicides	Other Violence	Congenital Debility, Premature Birth, Malformations, etc. (under 1)	Diarrhoea and Enteritis (under 2)	Puerperal Fever	Other Accidents of Child Birth
1907	808,803	28.8	15.3	133	.09	—	.51	.15	.30	.20	.16	1.11	.43	.80	?	?	3.07	?	?	.09	.47	?	?	1.51	1.85
1908	817,060	29.1	15.3	130	.07	—	.08	.15	.49	.20	.31	1.24	.35	.85	?	?	2.82	?	?	.10	.44	?	?	0.50	2.29
1909	825,400	27.4	15.1	121	.04	—	.82	.18	.23	.20	.18	1.22	.30	.82	?	?	2.95	?	?	.10	.41	?	?	1.02	1.55
1910	833,826	26.8	13.2	115	.04	—	.05	.14	.34	.13	.11	1.08	.32	.89	?	?	2.48	?	?	.11	.45	?	?	1.48	2.11
	Average	**28.3**	**15.0**	**131**	**.06**	—	**.36**	**.14**	**.36**	**.18**	**.18**	**1.16**	**.35**	**.84**	?	?	**2.82**	?	?	**.10**	**.44**	?	?	**1.12**	**2.16**
1911	842,337	26.1	15.0	150	.04	.00	.47	.10	.17	.13	.09	1.14	.32	.89	?	?	2.51	?	?	.12	.41	?	?	1.64	2.18
1912	850,947	26.1	14.1	111	.04	—	.67	.18	.39	.12	.12	1.28	.24	.93	1.36	1.33	2.68	.95	.50	.07	.45	48.4	10.8	1.22	2.03
1913	859,644	27.3	14.9	129	.02	—	.46	.20	.19	.19	.13	1.19	.34	1.02	1.37	1.53	2.48	1.68	.56	.11	.45	48.2	35.5	1.85	2.01
1914	882,534	26.4	14.8	122	.02	—	.35	.17	.35	.30	.16	1.20	.27	.88	1.35	1.74	2.69	1.49	.51	.09	.43	47.2	27.6	1.42	1.77
1915	891,234	23.8	14.4	118	.01	—	.47	.07	.14	.15	.16	1.28	.27	1.00	1.36	1.82	2.82	1.31	.48	.05	.45	42.8	27.3	1.65	1.79
	Average	**25.9**	**14.6**	**126**	**.03**	**.00**	**.48**	**.14**	**.25**	**.18**	**.13**	**1.22**	**.29**	**.94**	**1.36**	**1.60**	**2.64**	**1.36**	**.51**	**.09**	**.44**	**46.6**	**25.3**	**1.56**	**1.96**
1916	895,678	23.1	13.5	104	.01	—	.11	.03	.42	.13	.16	1.24	.24	1.00	1.29	1.88	2.60	1.07	.45	.05	.40	39.5	18.4	1.50	1.94
1917	900,000	19.7	12.6	101	.01	—	.37	.01	.14	.13	.11	1.30	.26	1.02	1.23	1.87	2.10	.88	.44	.06	.38	43.8	15.0	1.47	1.13
1918	870,000	19.4	15.2	99	.01	—	.08	.01	.32	.18	2.50	1.35	.25	1.02	1.18	1.76	2.85	.96	.40	.07	.35	38.7	18.5	1.72	1.31
1919	910,000	20.9	13.0	84	.01	—	.20	.05	.06	.14	1.15	1.10	.18	1.01	1.07	1.73	2.67	.66	.35	.11	.34	40.0	9.9	1.19	1.45
1920	910,000	27.6	12.6	83	—	—	.16	.12	.20	.22	.46	.93	.17	1.12	1.06	1.72	2.46	.82	.32	.11	.34	35.2	9.5	2.03	1.56
	Average	**22.1**	**13.4**	**94**	**.01**	—	**.18**	**.04**	**.23**	**.16**	**.88**	**1.18**	**.22**	**1.03**	**1.17**	**1.79**	**2.54**	**.88**	**.39**	**.08**	**.36**	**39.4**	**14.3**	**1.58**	**1.48**
1921	919,683	24.1	11.3	83	.01	—	.17	.04	.10	.13	.15	.97	.16	1.12	0.98	1.64	2.02	.93	.38	.10	.26	36.6	16.6	1.17	1.67
1922	927,844	21.5	12.1	86	.00	—	.09	.04	.38	.10	.48	.97	.16	1.18	1.04	1.85	2.38	.66	.37	.12	.26	37.4	8.5	1.26	1.76
1923	936,079	20.4	11.0	72	.00	—	.20	.04	.05	.15	.28	.92	.16	1.17	1.00	1.71	1.98	.70	.39	.14	.35	31.3	10.9	1.78	1.73
1924	944,386	19.2	11.6	83	.01	—	.08	.02	.19	.10	.39	.97	.13	1.30	1.00	1.91	2.15	.70	.37	.10	.31	37.2	9.2	2.01	1.90
1925	952,766	18.8	11.7	78	.00	—	.11	.02	.23	.10	.39	.98	.16	1.27	0.98	2.12	1.97	.73	.37	.11	.33	34.0	11.3	1.96	2.19
	Average	**20.8**	**11.5**	**80**	**.00**	—	**.13**	**.03**	**.19**	**.12**	**.34**	**.96**	**.15**	**1.21**	**1.00**	**1.85**	**2.10**	**.74**	**.38**	**.11**	**.30**	**35.3**	**11.3**	**1.64**	**1.85**
1926	961,222	18.7	11.3	73	.00	—	.08	.01	.13	.12	.27	.94	.12	1.26	1.07	2.12	1.88	.73	.40	.12	.32	32.2	11.2	2.29	1.84
1927	969,752	17.8	11.8	75	.00	—	.13	.01	.07	.08	.41	.89	.17	1.36	0.95	2.28	1.89	.70	.41	.15	.36	35.1	11.5	1.45	2.14
1928	976,500	17.6	10.9	65	.00	.00	.04	.01	.17	.07	.13	.86	.13	1.35	0.94	2.41	1.56	.67	.48	.16	.40	31.6	9.3	1.86	1.97
1929	981,000	17.1	13.5	79	.00	—	.20	.01	.13	.09	1.09	.94	.15	1.34	0.98	2.76	2.26	.76	.53	.16	.42	35.4	13.9	1.55	2.44
1930	982,000	17.7	10.8	60	.01	—	.06	.02	.11	.09	.13	.90	.13	1.43	0.88	2.57	1.32	.60	.44	.15	.40	30.6	7.6	1.55	1.84
	Average	**17.8**	**11.6**	**70**	**.00**	**.00**	**.10**	**.01**	**.12**	**.09**	**.41**	**.91**	**.13**	**1.35**	**0.96**	**2.43**	**1.78**	**.69**	**.45**	**.15**	**.38**	**33.0**	**10.7**	**1.74**	**2.05**
1931	1,001,300	16.9	11.7	71	.00	—	.18	.01	.09	.06	.27	.92	.14	1.46	0.77*	2.90	1.61	.62	.45	.15	.38	34.6	8.7	1.64	2.17
1932	1,017,500	16.3	11.3	67	.00	—	.05	.01	.13	.03	.36	.83	.10	1.45	0.87*	2.73	1.47	.59	.45	.19	.35	33.6	7.7	1.68	2.05
1933	1,023,500	14.7	11.0	66	.00	—	.08	.02	.03	.03	.44	.85	.11	1.43	0.70*	2.94	1.32	.61	.40	.17	.39	33.7	7.8	1.66	2.06
1934	1,028,000	15.3	11.0	68	.01	—	.02	.01	.11	.08	.18	.71	.08	1.43	0.76*	3.04	1.26	.67	.44	.16	.38	35.0	8.7	1.85	1.98
1935	1,033,000	15.4	10.9	64	.00	—	.05	.01	.06	.08	.15	.71	.08	1.52	0.72*	3.14	1.09	.62	.46	.13	.40	36.3	7.7	1.45	2.07
	Average	**15.7**	**11.2**	**67**	**.00**	—	**.08**	**.01**	**.08**	**.06**	**.28**	**.80**	**.10**	**1.46**	**0.76***	**2.95**	**1.35**	**.62**	**.44**	**.16**	**.38**	**34.6**	**8.1**	**1.66**	**2.07**
1936	1,038,000	15.8	11.3	62	.00	—	.04	.01	.10	.06	.13	.71	.07	1.57	0.69*	3.43	1.22	.62	.45	.12	.38	32.8	5.4	1.53	2.14
1937	1,042,000	16.3	11.7	60	.00	—	.07	.01	.03	.08	.40	.72	.08	1.62	0.73*	3.40	1.40	.56	.45	.15	.39	33.1	5.1	0.77	2.30
1938	1,048,000	16.6	10.9	61	—	—	.01	.01	.07	.07	.15	.70	.08	1.59	0.61*	3.45	1.18	.61	.43	.16	.34	28.5	12.5	0.63	2.17
1939	1,055,000	16.6	11.4	60	.00	—	.02	.00	.05	.05	.16	.77	.07	1.55	0.67*	3.65	1.16	.45	.39	.15	.36	29.1	13.7	0.86	1.72
1940	1,020,000	16.9	14.3	70	.00	—	.01	.01	.07	.05	.22	.77	.07	1.61	1.31*	3.31	2.21	.55	.46	.14	.42	28.2	12.1	0.58	1.63
	Average	**16.4**	**11.9**	**63**	**.00**	—	**.03**	**.01**	**.06**	**.06**	**.21**	**.73**	**.07**	**1.59**	**0.80**	**3.45**	**1.43**	**.56**	**.44**	**.14**	**.38**	**30.3**	**9.8**	**0.87**	**1.99**
1941	950,000	16.8	13.2	69	.01	—	.05	.00	.12	.09	.15	.81	.09	1.70	1.30*	3.10	1.94	.72	.45	.12	.44	26.4	11.3	0.82	1.75
1942	965,000	19.3	11.8	56	.00	—	.02	.00	.05	.05	.10	.77	.09	1.77	1.28*	2.87	1.51	.64	.43	.11	.37	29.4	9.8	1.13	1.29
1943	965,000	20.9	12.1	55	.00	—	.01	—	.06	.04	.34	.71	.07	1.83	1.34*	3.02	1.73	.46	.45	.11	.31	25.4	9.1	0.79	0.94
1944	990,000	22.8	11.3	42	—	—	.00	.00	.03	.02	.11	.70	.09	1.75	1.29*	3.15	1.40	.43	.42	.08	.32	21.7	6.0	0.62	0.75

*Exclusive of General Paralysis

TABLE II. CAUSES OF DEATH AT DIFFERENT AGE PERIODS IN 1944

No.	Causes of Death.	Sex	AGES AT DEATH 0–	1–	2–	5–	15–	25–	45–	65–	75–	All Ages
1	Typhoid & Paratyphoid Fever...	M.	—	—	—	—	—	—	—	—	—	—
		F.	—	—	—	—	—	—	—	—	—	—
1A	Small Pox	M.	—	—	—	—	—	—	—	—	—	—
		F.	—	—	—	—	—	—	—	—	—	—
2	Measles	M.	—	—	—	—	—	—	—	—	—	—
		F.	1	2	2	—	—	—	—	—	—	5
3	Scarlet Fever	M.	—	—	—	—	—	—	1	—	—	1
		F.	—	—	—	—	—	—	—	—	—	—
4	Whooping Cough ...	M.	7	2	—	—	—	—	—	—	—	9
		F.	15	6	3	1	—	—	—	—	—	25
5	Diphtheria	M.	3	2	4	2	—	1	—	—	—	12
		F.	1	—	1	3	1	—	1	—	—	7
6	Influenza	M.	7	1	—	—	2	3	29	10	12	64
		F.	—	3	1	1	1	2	11	11	13	43
6A	Poliomyelitis	M.	—	—	—	—	1	—	—	—	—	1
		F.	—	—	—	—	—	—	—	—	—	—
7	Encephalitis Lethargica	M.	—	—	—	—	—	3	—	—	—	3
		F.	—	—	—	1	—	1	3	—	—	5
8	Cerebro-Spinal Fever ...	M.	3	—	—	—	—	2	2	—	—	7
		F.	1	—	1	2	1	1	2	—	—	8
9	Tuberculosis of Respiratory System	M.	2	5	6	6	42	174	164	30	7	436
		F.	3	1	2	4	82	94	54	17	3	260
10A	Tubercular Meningitis	M.	2	5	2	3	5	3	3	—	—	23
		F.	1	3	4	5	6	—	1	—	—	20
10B	Tuberculosis of the Abdomen	M.	—	1	—	—	1	—	1	—	—	3
		F.	—	—	—	—	—	2	2	—	—	4
10C	Tuberculosis of Spinal Column	M.	—	—	—	—	3	—	—	—	—	3
		F.	—	—	—	—	—	2	1	—	—	3
10D	Tuberculosis of Joints	M.	—	—	—	—	—	—	—	—	1	1
		F.	—	—	—	—	—	1	—	—	—	1
10E	Disseminated Tuberculosis ...	M.	1	—	2	1	—	4	—	—	1	9
		F.	3	1	—	1	1	3	—	—	—	9
10F	Tuberculosis of Glands and other parts ...	M.	—	1	—	—	—	1	3	1	—	6
		F.	—	—	—	—	1	1	1	1	—	4
11	Syphilis	M.	1	—	—	—	—	2	24	14	1	42
		F.	1	—	—	1	—	3	9	5	—	19
12	General Paralysis of Insane, Tabes Dorsalis	M.	—	—	—	—	—	2	7	5	—	14
		F.	—	—	—	—	—	2	1	1	—	4
13A	CANCER of Buccal Cavity and Pharynx	M.	—	—	—	—	—	1	14	18	13	46
		F.	—	—	—	—	—	—	10	3	3	16
13B	Digestive Organs Peritoneum	M.	—	—	—	—	—	18	189	172	77	456
		F.	—	—	—	—	—	29	148	138	97	412
13C	Respiratory Organs ...	M.	—	—	—	—	—	18	125	50	14	207
		F.	—	—	—	—	1	4	22	8	5	40
13D	Genital Organs ...	M.	—	—	—	—	—	1	13	20	17	51
		F.	—	—	—	—	1	15	75	32	13	136
13E	Breast	M.	—	—	—	—	—	—	3	—	1	4
		F.	—	—	—	—	—	20	74	40	33	167
13F	Urinary Organs ...	M.	—	1	—	—	—	5	19	20	11	56
		F.	—	—	—	1	—	—	10	11	3	25
13G	Skin	M.	—	—	—	—	—	—	1	3	5	9
		F.	—	—	—	—	—	2	2	1	3	8
13H	Other Organs	M.	2	—	—	2	5	7	21	9	5	51
		F.	—	1	1	2	2	5	21	9	9	50
14	Diabetes	M.	—	—	—	—	—	4	6	11	6	27

No.	Causes of Death.	Sex	AGES AT DEATH. 0–	1–	2–	5–	15–	25–	45–	65–	75–	All Ages
14A	Rheumatic Fever ...	M.	—	—	—	7	4	6	1	2	—	20
		F.	—	—	—	7	3	5	7	3	1	26
14B	Chronic Rheumatism Osteo-Arthritis ...	M.	—	—	—	—	—	—	1	1	1	3
		F.	—	—	—	—	—	—	3	5	4	12
15	Cerebral Haemorrhage, etc.	M.	1	—	—	2	1	6	143	205	149	507
		F.	—	—	—	—	1	11	152	217	208	589
15A	Other Nervous Disorders and Sense Organs ...	M.	25	1	1	4	6	21	20	17	5	100
		F.	17	2	4	5	6	20	14	14	5	87
16	Heart Disease ...	M.	—	—	—	2	7	48	322	451	472	1302
		F.	—	1	—	10	15	60	246	396	738	1466
17	Aneurysm	M.	—	—	—	—	—	3	3	—	—	6
		F.	—	—	—	—	—	5	6	1	1	13
18	Arterio-Sclerosis and other Circulatory Dis.	M.	—	—	—	—	—	5	42	62	72	181
		F.	—	—	—	—	—	5	20	42	84	151
19	Bronchitis	M.	16	1	1	—	4	18	184	140	97	461
		F.	15	1	—	1	2	6	57	86	129	297
20	Pneumonia (all forms)	M.	75	3	5	7	3	20	89	66	44	312
		F.	72	7	5	3	4	10	26	43	50	220
21	Other Respiratory Diseases	M.	3	1	—	—	2	3	34	11	7	61
		F.	1	—	2	1	1	7	13	6	1	32
22	Peptic Ulcer	M.	—	—	—	—	2	17	62	21	5	107
		F.	1	—	—	—	1	2	13	6	7	30
23	Diarrhoea and Enteritis	M.	64	4	—	—	1	5	2	1	1	78
		F.	67	1	2	1	1	2	—	1	4	79
24	Appendicitis	M.	—	—	2	6	4	7	3	4	1	27
		F.	—	1	2	5	6	4	8	5	—	31
25	Cirrhosis of Liver ...	M.	—	—	—	—	—	1	14	4	—	19
		F.	—	—	—	—	—	2	5	3	1	11
26	Other Disorders of Liver, etc.	M.	—	—	—	—	—	3	7	3	2	15
		F.	2	—	—	—	—	6	9	12	5	34
27	Other Digestive Diseases	M.	5	—	—	1	1	7	12	22	9	57
		F.	6	2	—	2	—	8	23	15	20	76
28	Acute and Chronic Nephritis	M.	—	—	3	5	4	16	40	39	23	130
		F.	—	1	—	3	4	17	42	28	23	118
28A	Other Genito-Urinary Disorders	M.	3	—	—	—	—	3	28	50	51	135
		F.	—	—	—	—	—	6	13	10	—	29
29	Puerperal Sepsis ...	M.	—	—	—	—	—	—	—	—	—	—
		F.	—	—	—	—	3	11	—	—	—	14
30	Other Puerperal Causes	M.	—	—	—	—	—	—	—	—	—	—
		F.	—	—	—	—	2	15	—	—	—	17
31	Congenital Debility Premature Birth Malformations, etc.	M.	283	1	—	3	2	3	2	1	—	295
		F.	206	1	3	2	2	—	1	—	—	215
32	Senility	M.	—	—	—	—	—	—	—	5	62	67
		F.	—	—	—	—	—	—	4	18	136	158
33	Suicide	M.	—	—	—	—	4	10	21	11	1	47
		F.	—	—	—	—	3	14	15	3	3	38
34	Other Violence... ...	M.	11	4	13	37	13	27	38	39	25	207
		F.	10	3	5	10	5	7	19	22	29	110
34A	War Operations ...	M.	—	—	—	—	—	1	—	—	—	1
		F.	—	—	—	—	—	—	—	—	—	—
35	Other Causes	M.	5	2	7	8	10	17	44	27	21	141
		F.	4	3	2	6	7	20	44	29	19	134
	All Causes	M.	519	35	46	96	127	496	1737	1545	1219	5820
		F.	427	40	40	78	165	430	1206	1266	1671	5323

ABLE III

Cases of Infectious Disease notified and verified during 1944, classified according to Sex and Age.

Disease.	*Sex.*	Age Groups.													*Totals*
		0–	1–2	3–4	5–9	10–14	15–19	20–24	25–34	35–44	45–54	55–64	65–74	75 up	
Enteric Fever	M.	—	—	—	—	—	1	1	—	1	—	—	—	—	3
	F.	—	—	—	—	—	—	—	1	1	—	—	—	—	2
Scarlet Fever	M.	3	83	162	461	180	31	9	22	18	2	1	—	—	972
	F.	5	70	148	477	216	42	40	37	20	6	—	—	1	1062
Diphtheria	M.	11	33	38	89	60	16	10	13	—	2	—	—	—	272
	F.	11	15	43	104	84	43	43	57	21	4	3	1	—	429
Erysipelas	M.	2	1	—	2	2	5	1	9	35	31	37	16	13	154
	F.	2	4	2	—	3	14	13	30	29	44	43	23	10	217
Pulmonary Tuberculosis....	M.	3	11	14	17	9	58	83	151	136	117	87	33	6	725
	F.	4	7	8	13	8	74	106	112	62	36	21	13	1	465
Tubercular Meningitis	M.	2	6	1	2	1	4	1	—	1	—	1	—	—	19
	F.	—	5	2	2	3	3	—	—	—	1	—	—	—	16
Tuberculosis of Peritoneum & Intestines	M.	—	1	—	—	—	2	—	—	—	1	—	—	—	4
	F.	—	1	—	—	1	2	3	9	3	1	—	—	—	20
Other forms of Tuberculosis	M.	—	1	4	6	4	6	6	12	7	6	4	—	1	57
	F.	4	3	5	4	11	5	13	8	7	3	1	1	—	65
Cerebro-spinal Fever.....	M.	4	3	—	3	4	3	—	4	3	2	2	—	—	28
	F.	2	4	1	4	4	1	—	—	3	3	1	—	—	23
Anterior Poliomyelitis	M.	—	—	2	1	1	—	—	—	—	—	—	—	—	4
	F.	—	—	—	—	—	—	—	—	—	—	—	—	—	0
Polio-encephalitis	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	0
	F.	—	—	—	—	—	—	—	—	—	—	—	—	—	0
Encephalitis Lethargica	M.	—	—	—	1	—	—	—	—	—	—	—	—	—	1
	F.	—	—	—	—	1	—	—	—	—	—	—	—	—	1
Malaria	M.	—	—	—	—	—	1	17	29	4	1	—	—	—	52
	F.	—	—	—	—	—	—	—	—	—	—	—	—	—	0
Dysentery	M.	6	27	10	14	2	1	2	1	2	1	—	—	—	66
	F.	2	21	7	4	2	6	5	6	—	—	—	1	—	54
Smallpox	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	0
	F.	—	—	—	—	—	—	—	—	—	—	—	—	—	0
Pneumonia	M.	40	60	30	118	30	52	31	88	159	129	143	98	31	1009
	F.	23	63	44	73	26	18	38	81	68	54	56	46	23	613
Ophthalmia Neonatorum	M.	535	—	—	—	—	—	—	—	—	—	—	—	—	535
	F.	429	—	—	—	—	—	—	—	—	—	—	—	—	429
Puerperal Pyrexia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F.	—	—	—	—	—	9	101	182	61	1	—	—	—	354
Measles	M.	93	516	439	778	53	23	6	7	3	—	—	—	—	1918
	F.	104	468	443	840	66	39	32	26	8	4	1	—	—	2031
Whooping Cough	M.	204	446	365	314	12	2	—	2	1	—	—	—	—	1346
	F.	244	546	411	338	24	4	2	7	5	1	—	—	—	1582

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